



EUROPEAN
COMMISSION

Brussels, 14.7.2021
COM(2021) 551 final

2021/0211 (COD)

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757

(Text with EEA relevance)

{SEC(2021) 551 final} - {SWD(2021) 557 final} - {SWD(2021) 601 final} -
{SWD(2021) 602 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

- **Reasons for and objectives of the proposal**

The **European Green Deal Communication**¹ launched a new growth strategy for the EU that aims to transform the EU into a fair and prosperous society with a modern, resource-efficient and competitive economy. It reaffirms the Commission's ambition to increase its climate targets and make Europe the first climate-neutral continent by 2050. Furthermore, it aims to protect the health and well-being of citizens from environment-related risks and impacts. The necessity and value of the European Green Deal have only grown in light of the very severe effects of the COVID-19 pandemic on the health, living and working conditions and well-being of the Union's citizens.

Tackling climate change is an urgent challenge. In line with the scientific findings of the Intergovernmental Panel on Climate Change (IPCC) Special Report, global net-zero CO₂ emissions need to be achieved around 2050, and neutrality for all other greenhouse gases as soon as possible later in the century. This urgent challenge requires the EU to step up its action and demonstrate global leadership by becoming climate neutral by 2050. This objective is set out in the Communication '**A Clean Planet for all**' - A European strategic long-term vision for a prosperous, modern, competitive and climate-neutral economy'².

Based on the European Green Deal strategy and a comprehensive impact assessment, the Commission's Communication of September 2020 on **Stepping up Europe's 2030 climate ambition**³ ('2030 Climate Target Plan') proposed to raise the EU's ambition and put forward a comprehensive plan to increase the European Union's binding target for 2030 towards at least 55 % net emission reduction, in a responsible way. Raising the 2030 ambition now helps give certainty to policymakers and investors, so that decisions made in the coming years do not lock in emission levels inconsistent with the EU's objective to be climate neutral by 2050. The 2030 target is in line with the Paris Agreement objective to keep the global temperature increase to well below 2°C and pursue efforts to keep it to 1.5°C.

The European Council endorsed the new EU binding target for 2030 at its meeting of December 2020⁴. It also called on the Commission *"to assess how all economic sectors can best contribute to the 2030 target and to make the necessary proposals, accompanied by an in-depth examination of the environmental, economic and social impact at Member State level, taking into account national energy and climate plans and reviewing existing flexibilities"*.

¹ COM(2019)640 final.

² COM(2018) 773 final.

³ COM (2020) 562 final.

⁴ European Council Conclusions 10-11 December 2020 EUCO 22/20 CO EUR 17 CONCL 8.

To this end, the **European Climate Law**⁵, as agreed with the co-legislators, makes the EU's climate neutrality target legally binding, and raises the 2030 ambition by setting a target of at least 55 % net emission reductions by 2030 compared to 1990.

In order to follow the pathway proposed in the European Climate Law, and deliver this increased level of ambition for 2030, the Commission has reviewed the climate and energy legislation currently in place that are expected to only reduce greenhouse gas emissions by 40 % by 2030 and by 60 % by 2050. This '**Fit for 55**' legislative package, as announced in the 2030 Climate Target Plan, is the most comprehensive building block in the efforts to implement the ambitious new 2030 climate target, and all economic sectors and policies will need to make their contribution.

The European Council also invited the Commission in December 2020 to consider exploring ways to strengthen the EU Emissions Trading System (EU ETS), while preserving its integrity and taking into account the need to address distributional concerns and energy poverty. The European Council also invited the Commission to consider proposing measures that enable energy-intensive industries to develop and deploy innovative climate-neutral technologies while maintaining their industrial competitiveness.

The current ETS legislation was revised in 2018 to deliver a 43 % reduction in EU ETS emissions by 2030 compared to 2005, coherent with an EU economy-wide emissions reduction target of at least 40 % by 2030 compared to 1990. More recent analysis by the Commission services, however, indicates that, if the legislation remains unchanged, the sectors currently covered by the EU ETS would instead achieve emission reductions of -51 % in 2030 compared to 2005⁶.

Even though this would mean outperforming the contribution of -43 % referred to above, it would still be an insufficient contribution to an overall target of at least -55 % compared to 1990. Therefore, the general objective of this initiative is to revise the ETS Directive in a manner commensurate with the 2030 climate ambition to reach at least 55 % net greenhouse gas emission reductions by 2030 below 1990 levels and with a gradual and balanced trajectory towards climate neutrality by 2050, in a cost-effective and coherent way while taking into account the need for a just transition and the need for all sectors to contribute to the EU's climate efforts.

As explained in the impact assessment, contribution of the sectors covered by the EU ETS of -61 % compared to 2005 is considered as best reflecting the 2030 Climate Target Plan results and is taken as the EU ETS ambition contributing to an overall target of at least -55 % compared to 1990. Increasing the EU ETS's environmental contribution entails adjusting primarily the total number of allowances issued under the EU ETS (the 'cap'). However, a

⁵ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1).

⁶ Per the EU Reference Scenario 2020 (REF) which serves as baseline for the impact assessment (see section 5.1 of the impact assessment).

reduced amount of allowances available to the market affects other pillars of the EU ETS and the carbon price. It impacts core principles such as the need for market stability, the protection against the risk of carbon leakage, the carefully balanced distributional effects between Member States, and the availability of funds for the increased investment needs in low-carbon technologies.

At the same time as the EU ETS is brought in line with the overall target of at least -55 % compared to 1990, this increased climate ambition also needs to be reflected in the contribution to the EU's climate efforts of sectors currently outside of the EU ETS. The impact assessment accompanying the 2030 Climate Target Plan found that in the absence of additional measures, emissions in certain sectors would not decrease as much as required to be on a path to achieve an economy-wide 55 % reduction in emissions. In fact, in maritime transport, emissions today are higher than in 1990, and maritime transport emissions are expected to grow further in a business-as-usual scenario. All pathways assessed as part of the 2030 Climate Target Plan and the Sustainable and Smart Mobility Strategy⁷ envisage 80-82 % emissions reductions from international shipping by 2050 relative to 1990 (equivalent to 88-89 % emissions reductions relative to 2008)⁸, in order to be consistent with the increased level of climate ambition. Therefore, the European Commission undertook the commitment to extend the EU ETS to maritime transport as part of a basket of EU measures to address emissions from maritime transport, along with action agreed within the IMO. In this context, the Commission welcomes the progress that the European Parliament and the Council have made since 2019 on the proposal to amend Regulation (EU) 2015/757⁹ in order to take appropriate account of the global data collection system for ship fuel oil consumption data (COM(2019) 38 final) and the Commission takes note of the European Parliament's Plenary support for the extension of the EU's Emissions Trading System (EU ETS) to cover maritime transport emissions from 2023. Emissions from maritime transport should be included in the existing emissions trading system. To ensure a smooth transition, a phase-in period should be introduced where shipping companies would only have to surrender allowances for a portion of their verified emissions, gradually rising to 100 % over 4 years. As only around 90 million tons of CO₂ would be added through the extension to maritime transport to the existing ETS, the impact on the availability of allowances for other sectors covered would remain limited.

To take into account the inclusion of the maritime sector in the EU ETS, Regulation (EU) 2015/757 should be amended, in particular as regards the reporting of aggregated emissions data at company level and considering the role of administering authorities in respect of shipping companies. These amendments complement those proposed in COM(2019) 38 final.

As specified in the 2030 Climate Target Plan, the building sector is currently responsible directly and indirectly for 36 % of energy-related greenhouse gas emissions in the EU and has a large cost-effective potential to reduce emissions. More than half of those emissions are

⁷ Source: https://ec.europa.eu/transport/themes/mobilitystrategy_en

⁸ The choice of 2008 as a base year for the emissions reduction projections in maritime transport is made to allow consistency with the IMO objectives that are all expressed in relation to 2008.

⁹ Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC (OJ L 123, 19.5.2015, p. 55–76).

already covered by the existing ETS, notably the provision of electricity for use in buildings and most emissions of district heating. However, many homes are still heated with outdated systems that use polluting fossil fuels such as coal and oil.

The sector of road transport also has a significant cost-effective reduction potential. Today, road transport accounts for a fifth of the EU's greenhouse gas emissions and increased its emissions by over a quarter since 1990. As already considered in the European Green Deal Communication, the Commission is proposing to include the building sector and road transport into emissions trading. The coverage of these sectors by emissions trading, when put in the context of other appropriate regulatory and investment measures for the sectors in question, would provide for increased and more harmonised economic incentives to reduce emissions across these sectors in the EU and increased certainty of delivery of the emission reductions for those sectors.

Emissions trading for the buildings and road transport sectors should be introduced through separate but adjacent emissions trading. This will avoid any disturbance of the well-functioning emissions trading system for stationary installations and aviation, given the different reduction potentials in those sectors and different factors that influence the demand. Any possible merger of the two systems should be assessed only after a few years of functioning of the new emissions trading, based on experience. The extension to buildings and road transport requires an upstream approach to regulated entities.

Market stability is crucial for the EU ETS to function correctly to achieve its targets. To ensure market stability, Decision (EU) 2015/1814¹⁰ established the market stability reserve (MSR). It began operating in January 2019. The objectives of the MSR are to tackle historical supply-demand imbalances and to make the EU ETS more resilient to major imbalances. The mechanism must preserve regulatory stability and ensure long-term predictability. Article 3 of the Decision requires the Commission to review the functioning of the reserve within three years of the start of the operation. This review needs to be considered together with the effects for market stability of increasing the ambition of the EU ETS, so the necessary amendments to the reserve are proposed together with the amendments to the EU ETS with this proposal.

In this context, this proposal, as part of the Fit for 55 package, has the following specific objectives:

- strengthening the EU ETS in its current scope in order to provide the appropriate contribution to an overall target of at least -55 % GHG emissions compared to 1990;
- ensuring continued effective protection for the sectors exposed to a significant risk of carbon leakage while incentivising the uptake of low-carbon technologies;
- addressing the distributional and social effects of this transition, by reviewing the use of auctioning revenues and the size and functioning of the low-carbon funding mechanisms;

¹⁰ Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC (OJ L 264, 9.10.2015, p. 1–5).

- ensuring that the other sectors than those currently included in the EU ETS contribute cost-effectively to the emission reductions needed in line with EU targets and Paris Agreement commitments notably by including emissions from maritime transport and emissions from buildings and road transport under the rules of the EU ETS while ensuring synergies with other policies targeting those sectors;
- reviewing the monitoring, reporting and verification system of CO₂ emissions from maritime transport to take into account the inclusion of the maritime transport sector in the EU ETS;
- reviewing the market stability reserve in line with the corresponding legal obligation and examining possible amendments to its design, to fulfil the legal objectives in the MSR decision and to address any issues that may be raised in the context of the increased ambition.

- **Consistency with existing policy provisions in the policy area**

All sectors of the economy should contribute to the reduction of greenhouse gas emissions. The ‘Fit for 55’ climate and energy package is a comprehensive step in overhauling Union legislation to align it with the EU’s increased climate ambition. All initiatives in the package are closely interlinked, and each one depends on the design of the others. This legislative proposal is complementary to the proposals made in the package and maintains consistency with them.

Sectors outside the EU ETS are covered by the Effort Sharing Regulation¹¹ (ESR), which establishes an overall EU-wide greenhouse gas emission reductions target, as well as binding annual targets for individual Member States to be achieved by 2030. The ESR covers among others the road transport and buildings sectors, as well as emissions from domestic navigation, amounting together to around 50 % of ESR emissions. Contrary to the EU ETS, the sectors covered by the ESR are not subject to an EU-wide carbon price signal. By providing the additional economic incentives (through carbon pricing) necessary to achieving the cost-efficient emission reductions in buildings and road transport, the new ETS would complement the ESR in the current scope, which maintains incentives and accountability for national action. The importance of the latter has also been voiced by a large number of stakeholders. As the 2030 ambition of the emission trading for buildings and road transport is set in a consistent way with the cost-efficient contributions of the sectors covered, there is no distortion of the contributions of the ESR sectors not covered by EU-wide carbon pricing. National measures that address non-price barriers or make alternative solutions available can make carbon pricing work better.

Directive (EU) 2018/410 states in recital 4 that action from the International Maritime Organization (IMO) or the Union should start from 2023, including preparatory work on adoption and implementation of a measure ensuring that the sector duly contributes to the efforts needed to achieve the objectives agreed under the Paris Agreement and due

¹¹ Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26–42).

consideration being given by all stakeholders. Also, reducing maritime transport emissions is part of the EU economy-wide reduction commitment under the Paris Agreement.

To date, no adequate measures are in place, either at the global level or in the EU, to achieve the emission reductions necessary from the maritime transport sector to be in line with the EU's increased level of climate ambition. At the EU level, CO₂ emissions from ships above 5000 gross tonnage travelling to or from ports located within the EEA are being monitored, reported and verified (through the EU Maritime MRV Regulation)¹² since 2018. At the global level, a regulatory framework on the energy efficiency of new ships is in place and energy efficiency measures for existing ships have recently been approved. The IMO has also adopted an Initial Strategy on Reduction of Greenhouse Gas Emissions from Ships, which sets a greenhouse gas emission reduction objective of at least 50 % by 2050 compared to 2008 levels. While the recent progress achieved in IMO is welcome, these measures are insufficient to decarbonise international shipping in line with international climate objectives.

Given this situation, the European Commission committed to propose a basket of EU measures to increase the contribution of maritime transport to the EU climate efforts, along with the measures agreed at global level within the IMO. Beside the extension of the EU ETS to maritime transport, the basket of measures contains notably the FuelEU Maritime initiative, which aims to increase the demand and deployment of renewable alternative transport fuels, as well as a proposal to review the Energy Taxation Directive (ETD)¹³ with regard to the current exemption of fuel used by ships from taxation.

Currently, the EU ETS directly or indirectly covers around 30 % of buildings emissions from heating. This is related to the system's coverage of district heating and electricity used for heating purposes. Covering all emissions of fossil fuel combustion in this sector and integrating them in the EU emissions trading would present important benefits in terms of effectiveness of emissions reduction. In road transport, emissions trading would have the advantage of capturing fleet emissions under the cap and simultaneously incentivising behavioural change with lasting effects on mobility solutions through the price signal. Nevertheless, the CO₂ emissions performance standards for cars remain the main driver to ensure the supply of modern and innovative clean vehicles, including electric cars. In parallel to applying emissions trading to road transport, the Commission is proposing to strengthen the CO₂ standards for cars and vans for 2030 to ensure a clear pathway towards zero emissions mobility. In addition to the already specified possible auction revenue uses which include e.g. promoting skill formation and reallocation of labour, a part of the revenues generated by emissions trading in the new sectors could be used to address the social impacts arising from the new emissions trading in these sectors and invested in measures intended to accelerate the building renovation wave as well as the uptake of zero-emission vehicles and to develop the necessary infrastructure, such as strategically located, smart and intelligent refilling and

¹² Regulation (EU) 2015/757 on the monitoring, reporting and verification of CO₂ emissions from maritime transport, OJ L 123, 19.5.2015, p. 55–76

¹³ Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity (OJ L 283, 31.10.2003, p. 51–70).

charging stations for zero-emission vehicles. Support measures to promote energy efficiency in vulnerable or low-income households could also contribute to avoiding excessive distributional effects. To that end, within the ‘Fit for 55’ legislative package the Commission makes a proposal for establishing a Social Climate Fund to finance the relevant Member States’ plans to address social aspects of the emission trading for buildings and road transport with a specific emphasis on vulnerable households, micro-enterprises and transport users. Part of the auction revenues of the new system are to be used to finance the plans of the Member States.

The ambition level, emissions cap and trajectory for the new ETS is proposed to be set coherently in line with the cost-effective emission reductions of buildings and road transport stemming from a combination of carbon pricing and strengthening the existing regulatory framework for these sectors.

- **Consistency with other Union policies**

The European Green Deal, its climate neutrality objective, and the twin green and digital transition are a core priority of the European Union. The ‘Fit for 55’ package, the Next Generation EU and the Multiannual Financial Framework for 2021-2027 will help achieving the twin green and digital transitions that Europe is aiming for. The combination of these policies will address the economic crisis and accelerate the shift to a clean and sustainable economy, linking climate action and economic growth.

Reducing net GHG emission by 2030 compared to 1990 at an economy wide scale by at least 55 % calls not only for changes to the current climate, but also energy policy framework. The ‘Fit for 55’ package provides a comprehensive review of the climate and energy legislation to achieve this objective. The ETS amendment proposal is part of this large set of coherently designed policy proposals. The ETS is a core instrument to help the EU achieve the increased 2030 target and a successful and just transition towards the 2050 climate neutrality. As such, this initiative is linked to many other policy areas, including the Union’s external policies. For example, as a market-based EU-wide instrument, the ETS is consistent with and further strengthens the EU’s internal market.

The increased Innovation Fund under the ETS Directive, as one of the EU’s prime instruments to bring innovative low-carbon technologies closer to the market, complements other instruments such as Horizon 2020 and Horizon Europe which mainly focus on earlier research phases. The increased Modernisation Fund under the ETS Directive supports investments in modernising the power sector and wider energy systems, boosting energy efficiency, and facilitating a just transition in coal-dependent regions in lower-income MS. This complements other instruments such as cohesion policy and the Just Transition Fund.

Consistency with other Union policies is also ensured through the coherence of the impact assessments for the EU ETS with those for the remainder of the 2030 climate, energy and transport framework¹⁴, such as the complementarity of extending emission trading with the

¹⁴

Energy Efficiency Directive¹⁵, and with other measures presented as part of the basket of measures to address greenhouse gas emissions from maritime transport. A common baseline and common core policy scenarios with other initiatives of the ‘Fit for 55’ package are used. These scenarios take into account all relevant EU actions and policies.

Additional administrative costs of the extension to road transport and buildings are envisaged to be limited by using, where possible, existing structures used for the Energy Taxation Directive and for Energy Savings Obligations under the Energy Efficiency Directive. In turn, additional energy savings would be enhanced by the new ETS, with its potential link to energy savings under Article 7 of the Energy Efficiency Directive.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

The legal basis for this proposal is Article 192 TFEU. In accordance with Article 191 and 192(1) TFEU, the European Union shall contribute to the pursuit, inter alia, of the following objectives: preserving, protecting and improving the quality of the environment; promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

• Subsidiarity (for non-exclusive competence)

The EU ETS Directive is an existing EU legislative instrument adopted in 2003. In accordance with the principle of subsidiarity set out in Article 5 of the TFEU, the objectives of this proposal to amend the EU ETS Directive can only be achieved through a legislative instrument at EU level.

Similarly, Decision (EU) 2015/1814 of the European Parliament and of the Council concerning the establishment and operation of a market stability reserve for the EU ETS is an existing Union measure. Amending it, as is part of this proposal, cannot be achieved at national or local level, but requires Union action.

Climate change is a trans-boundary problem and EU action can effectively complement and reinforce global, regional, national and local action. Increasing the 2030 target for EU greenhouse gas reductions will impact many sectors across the EU economy and coordinated action at the EU level is therefore indispensable and has a much bigger chance of leading to

Notably the ESR; the Land Use, Land Use Change and Forestry (LULUCF) Regulation; CO2 Emissions Performance Standards for Cars and Vans; the Renewable Energy Directive (REDII); the Energy Efficiency Directive (EED); and, at a later stage, the Energy Performance of Buildings Directive. Other relevant initiatives include the revision of the Energy Taxation Directive; the Zero Pollution Action Plan and the revision of the Industrial Emissions Directive; initiatives on mobility, such as those on transport fuels (FuelEU maritime initiative and ReFuelEU aviation initiative) and a proposal for a Carbon Border Adjustment Mechanism (CBAM).

¹⁵ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1–56).

the necessary transformation, acting as a strong driver for cost-efficient change and upward convergence. Furthermore, many of the elements of this proposal have an important internal market dimension, in particular the options related to the carbon leakage protection and the low-carbon funding mechanisms.

As a carbon market, the EU ETS incentivises emission reductions to be made by the most cost-efficient solutions first across the activities it covers, achieving greater efficiency by virtue of its scale. Implementing a similar measure nationally would result in smaller, fragmented carbon markets, risking distortions of competition and likely lead to higher overall abatement costs. The same logic holds for the extension of carbon pricing to new sectors.

The cross-border dimension of the maritime transport sector calls for coordinated action at European level. EU action can also inspire and pave the way for broader action, e.g. as regards maritime transport within the International Maritime Organization (IMO) and by third countries.

- **Proportionality**

As set out in sections 3 and 7 of the impact assessment accompanying this proposal, the proposal complies with the proportionality principle because it does not go beyond what is necessary in order to achieve the objectives of implementing the EU's greenhouse gas emission reduction target for 2030 in a cost-effective manner while at the same time ensuring the proper functioning of the internal market.

The European Council has endorsed an overall economy-wide and domestic reduction in greenhouse gas emissions of at least 55 % below 1990 levels by 2030. This proposal covers a large part of these greenhouse gas emissions, and revises the EU ETS Directive in order to achieve this objective.

- **Choice of the instrument**

The objectives of this proposal can be best pursued through a Directive. This is the most appropriate legal instrument to make amendments to the existing ETS Directive (Directive 2003/87/EC).

A Directive requires Member States to achieve the objectives and implement the measures into their national substantive and procedural law systems. This approach gives the Member States more freedom when implementing an EU measure than does a Regulation, in that Member States are left the choice of the most appropriate means of implementing the measures in the Directive. This allows Member States to ensure that the amended rules are consistent with their existing substantive and procedural legal framework implementing the EU ETS, in particular regulating permits for installations as well as enforcement measures and penalties.

A Directive is also the appropriate instrument to amend Decision (EU) 2015/1814 on the establishment and operation of a market stability reserve because the review of this legal

instrument is closely related to the effects on market stability of the increased ambition of the EU ETS.

This Directive is also the appropriate instrument to amend Regulation (EU) 2015/757 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, because this Directive includes CO₂ emissions from certain maritime transport activities in the EU ETS, based on emissions data coming from Regulation (EU) 2015/757.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- ***Ex-post* evaluations/fitness checks of existing legislation**

There was no *ex-post* evaluation or fitness check related to this proposal due to the early stage of implementation of the current ETS legislation, which started to apply in 2021 as amended by Directive (EU) 2018/410 of the European Parliament and of the Council¹⁶. Consequently, limited data was available for an evaluation.

- **Stakeholder consultations**

At various steps in developing this proposal, Member States, industry representatives from the private sector, non-governmental organisations, research and academic institutions, trade unions and citizens were involved.

The revision of the EU ETS builds upon the feedback on the 2030 Climate Target Plan and interlinkages of the EU ETS with parallel policies and the broader objectives of the European Green Deal. The main objective of the consultations on the EU ETS revision was to gather stakeholders' views on the strengthening of the existing EU ETS, the extension of the EU ETS to new sectors (maritime transport as well as buildings, road transport or all fossil fuel combustion) and the review of the MSR. The consultation also looked for inputs on how to address the risk of carbon leakage, the use of revenues and low-carbon support mechanisms.

The Commission first invited feedback on an inception impact assessment, outlining the initial considerations and policy options of the revision¹⁷. The Commission then organised an online public consultation with a questionnaire for each of the proposals of the 'Fit for 55' package, receiving almost 500 replies¹⁸. To support the initiative concerning carbon pricing for maritime transport, a targeted stakeholder survey was carried out accompanied by a

¹⁶ Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 (OJ L 76, 19.3.2018, p. 3–27).

¹⁷ The inception impact assessment was open for feedback from 29 October 2020 to 26 November 2020 and received about 250 contributions. The outcome can be found on the following website: <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12660-Updating-the-EU-Emissions-Trading-System>.

¹⁸ This was open for 12 weeks from 13 November 2020 to 5 February 2021. The outcome can be found on the following website: <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12660-Updating-the-EU-Emissions-Trading-System/public-consultation>.

targeted interview programme¹⁹. In addition, the Commission held (virtual) bilateral and multilateral stakeholder meetings, including with industry representatives across different sectors, trade unions, non-governmental organisations and Member States and participated in virtual conferences. Finally, the Commission instructed a contractor to organise two expert workshops²⁰ on the review of the MSR.

The results of the consultation activities are reported in the impact assessment accompanying this proposal and have been taken into account for the current proposal to the extent possible.

In general, the public consultations showed broad support for the EU ETS as a policy instrument.

Many stakeholders support the strengthening of the existing EU ETS to increase its ambition in line with the new 2030 target and based on cost-efficiency considerations. Only some respondents from the private sector and from civil society argued for, respectively, a lower or higher contribution compared to the cost-efficiency principle. To achieve the strengthened ambition, stakeholders generally found the adjustment of the linear reduction factor important, while some stakeholders also highlighted the importance of a combination with a one-off reduction in the quantity of allowances, as reflected in this proposal.

On free allocation and the risk of carbon leakage, a large majority of stakeholders is in favour of amending the current carbon leakage framework, while some industry stakeholders want to maintain the current carbon leakage framework without changes. Opinions on the specific amendment options are mixed and the introduction of other measures to further incentivise greenhouse gas reductions received the largest support. The proposal provides such incentives by making free allocation conditional on investments in techniques to increase energy efficiency. The modification of the benchmark values to ensure faster incorporation of innovation and technological progress obtained support from a wide range of stakeholders except from some parts of the private sector. The proposal includes this approach as it is considered to deliver a fairer and more transparent distribution of free allocation than a higher cut for all sectors by the cross-sectoral correction factor.

As regards the use of auction revenues, the proposal reflects the view expressed by many stakeholders that stricter rules are necessary to ensure Member States spend their EU ETS auction revenues in line with climate objectives.

With regard to low-carbon funding mechanisms, stakeholders generally welcome an increase in the size of the Innovation Fund as well as the introduction of additional supporting instruments such as carbon contracts for difference. This is duly reflected in the proposal by increasing the size of the Innovation Fund and extending its scope.

¹⁹ The stakeholder survey run from December 2020 and February 2021, and the targeted interview programme from January 2021 to February 2021.

²⁰ https://ec.europa.eu/clima/events/expert-workshop-market-stability-reserve_en.
https://ec.europa.eu/clima/events/2nd-expert-workshop-market-stability-reserve_en.

With regard to the Modernisation Fund, a majority of stakeholders, in particular from civil society and parts of the private sector, supports an increase in the Modernisation Fund, as reflected in this proposal. Stakeholders generally support the streamlining of the types of investments that can be financed by the Modernisation Fund and enhancing the Modernisation Fund's coherence with the European Green Deal. The proposal contributes to this objective by removing the exception for the financing of fossil fuel-fired district heating in certain Member States.

The market stability reserve (MSR) has wide support across stakeholder groups; however, there is no consensus about which changes should be made to its parameters. Civil society expressed more support for a strengthening of the parameters of the MSR than the private sector. There was support for maintaining the invalidation rule, either unreservedly or with an amendment, while some stakeholders suggested that the invalidation rule should be abolished. At the expert workshops, some stakeholders saw a need for a variable intake rate to avoid large threshold effects and more frequent reviews. The proposal strikes a balance between the need to ensure a reduction of the market surplus over a reasonable time horizon, the predictability of the mechanism as well as its complexity. In addition, the proposal to include aviation allowances and emissions in the calculation of the surplus corresponds to the preferred option of the majority of stakeholders.

With regard to maritime transport, the vast majority of stakeholders that took part in the targeted survey indicated that the maritime sector should contribute more to climate action than it currently does. The extension of the existing EU ETS to maritime transport is the preferred carbon pricing option expressed by stakeholders out of the proposed options, while the shipping industry stressed the importance of measures at international level. The proposal addresses views expressed by stakeholders by covering emissions from intra-EU voyages and half of the emissions from extra-EU voyages and including a review clause in relation to the work in the International Maritime Organization (IMO) towards global market-based measures. This is one of the five approaches which are still under consideration in the United Nations Framework Convention on Climate Change (UNFCCC) context.

With regard to the road transport and buildings sectors, several stakeholders, including social partners from both the employer and employee side, are generally sceptical about an extension of emissions trading to these sectors. Among the presented options, the preferred policy option of a wide range of stakeholders is to start with a separate self-standing system, as reflected in this proposal. Views are divided on whether the EU ETS revision should already determine when and how emissions trading for the road transport and buildings sectors could be gradually integrated into the existing EU ETS. In particular, non-governmental organisations pointed to the risks associated with a linking of the two systems. The proposal duly takes into account such concerns by proposing separate but adjacent emissions trading and a review clause.

- **Collection and use of expertise**

This proposal builds upon evidence gathered in the impact assessment for the previous EU ETS revision concluded in 2018, the impact assessment accompanying the 2030 Climate

Target Plan²¹, analysis conducted in support of the Commission’s European strategic long-term vision of a prosperous, modern, competitive and climate neutral economy²² and relevant evidence compiled in other concurrent Green Deal initiatives, as well as earlier studies related to maritime, road transport and buildings greenhouse gas emissions. It builds on emissions data and experiences from the implementation of the EU monitoring, reporting and verification systems.

As other proposals and impact assessments of the “Fit for 55” policy package, this proposal also makes use of a collection of integrated modelling tools covering the entire greenhouse gas emissions of the EU economy. These tools are used to produce a set of core scenarios reflecting self-consistent policy packages aligned with the increased 2030 climate target building upon the scenarios developed for the 2030 Climate Target Plan.

The scenarios are based on the updated EU Reference Scenario²³, a projection of the evolution of EU and national energy systems and greenhouse gas emissions under the current policy framework which includes COVID-19 impacts. These scenarios were prepared with the help of a contract with E3M lab, National Technical University of Athens, and the detailed modelling results are published alongside the proposals.

In addition, the Commission bases itself on the growing body of peer-reviewed empirical research on the EU ETS and makes use of several support contracts. Among the support contracts, Vivid Economics conducted a study to support the European Commission in the review of the MSR²⁴. Concerning carbon leakage provisions, support work was carried out by Öko-Institut, Trinomics, Ricardo and Adelphi.

Furthermore, a study team led by Ricardo conducted a study on “EU ETS for maritime transport and possible alternative options or combinations to reduce greenhouse gas emissions”²⁵.

- **Impact assessment**

The proposed Directive is accompanied by an impact assessment, which builds on the findings of the comprehensive impact assessment for the 2030 Climate Target Plan²⁶. This formed the analytical basis to set the objective of at least net 55 % reduction in greenhouse gas emissions by 2030 compared to 1990. An executive summary and the positive opinion of the regulatory scrutiny board on the impact assessment are also made publicly available. The

²¹ SWD(2020)176.

²² European Commission: In-depth analysis in support of the Commission Communication COM(2018) 773 A Clean Planet for all, A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy, Brussels 28 November 2018.

²³ Modelling-based projections of energy, transport and greenhouse gas emissions trends to 2050, building on consistent set of assumptions across EU, Member States and EU policies, Member States specific characteristics; and relying on the consultation of Member States experts.

²⁴ Vivid Economics, (2021) – “Review of the EU ETS’ Market Stability Reserve”, report prepared for DG CLIMA, publication upcoming.

²⁵ Ricardo, E3 Modelling and Trinomics, (2021) – “Study on EU ETS for maritime transport and possible alternative options or combinations to reduce greenhouse gas emissions”, publication upcoming.

²⁶ SWD (2020) 176.

impact assessment is based on integrated modelling scenarios that reflect the interaction of different policy instruments on economic operators, in order to ensure complementarity, coherence and effectiveness in achieving the 2030 climate ambition. This is complemented by available data and specific analytical tools for addressing specific policy design questions.

The impact assessment analyses three types of problems. First, those associated with the need to strengthen the existing EU ETS in a commensurate way with the increased net greenhouse gas emissions reduction target by 2030, compared to 1990, of at least -55 %, while avoiding supply/demand imbalances. Second, the need to ensure certain sectors contribute sufficiently to the achievement the increased target. Finally, the need for increased investment and greater capacity to address the distribution of impacts of emission reduction measures, while funds remain limited.

Regarding strengthening the existing EU ETS to increase its ambition in line with the net at least -55 % 2030 target, any of the option packages would be effective and efficient in achieving the 2030 objective. The impact assessment also concluded that a more targeted approach to free allocation is needed, where it still applies, in the form of strengthened benchmarks and conditionality on decarbonisation efforts in order to incentivise the uptake of low-carbon technologies.

Regarding the MSR, the impact assessment amongst other showed that to maintain the good functioning of the EU ETS, the intake rate should be maintained at 24 % until 2030, and adapted so as to remove the undesired ‘threshold effect’. This threshold effect appears when the total number of allowances in circulation (the TNAC) is very close to the 833 million upper threshold, which determines the intake of allowances in the MSR. In that case, one allowance more or less in the TNAC may trigger the full intake volume of 200 million allowances or nothing, depending on whether the TNAC is above or below the threshold. Uncertainty about this happening or not could create price volatility on the market and increase the risk of market abuse.

To extend the climate policy framework to maritime transport, four main options and different geographical scopes were analysed. The preferred option is the integration of the maritime transport sector in the existing EU ETS.

The impact assessment looked at establishing emissions trading for road transport and buildings or all fossil fuel combustion as a new self-standing emissions trading as a main option. Both options would provide additional economic incentives and via the cap ensure the delivery of the same relative reduction in emissions in the sectors concerned, of 43 % by 2030 compared to 2005. Including only buildings and road transport in the scope of an additional emission trading system, as opposed to all fossil fuel-consuming sectors currently outside the ETS, has clear benefits in terms of economic efficiency, notably as it would avoid the creation of a new carbon leakage risk protection regime for those parts of small industry, who would need such a regime, but would be subject to a burden that would probably be disproportionate to its benefits.

- **Regulatory fitness and simplification**

The EU ETS legislation has consistently favoured approaches to minimise the regulatory burden for both economic operators and administrations. While the majority of installations under the EU ETS are in the energy-intensive industries with market structures characterised by large enterprises, the proposal also caters for small emitters, which may be owned by SMEs or micro enterprises. In particular, in addition to existing rules alleviating the administrative burden and costs of monitoring and reporting emissions, installations with low emissions benefit from the possibility for Member States to exclude them from the EU ETS if they are subject to national measures leading to an equivalent contribution to emission reductions.

In line with the Commission's commitment to Better Regulation, this proposal has been prepared inclusively, based on full transparency and continuous engagement with stakeholders, listening to external feedback and taking into account external scrutiny to ensure the proposal strikes the right balance (see also section on the collection and use of expertise).

The envisaged extension to maritime transport would build on existing monitoring, reporting and verification (MRV) mechanisms that exempt small ships and that will need to be amended with a view to make them fit for emissions trading. Keeping a single MRV system will keep the compliance efforts and administrative burden for shipping companies lower than if there were several systems. The new EU ETS for other sectors would apply upstream, building on existing provisions regulating tax warehouses or fuel suppliers.

- **Fundamental rights**

The proposal respects fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union. In particular, it contributes to the objective of a high level of environmental protection in accordance with the principle of sustainable development as laid down in Article 37 of the Charter²⁷.

4. BUDGETARY IMPLICATIONS

The EU ETS generates significant revenues. At present most of those auction revenues accrue to Member States.

Adjustments to the EU budgetary framework will be presented by the Commission as part of the upcoming Own Resources package including a proposal to amend the multiannual financial framework. National budgets of Member States will benefit from the extension of the EU ETS scope to maritime transport and from the new emissions trading for road transport and buildings.

The secure operation of the Union registry is funded from the Union budget. Extending the EU ETS scope to maritime transport and the new EU ETS for road transport and buildings will require additional resources for the secure operation of the Union registry, as specified in the financial statement accompanying this proposal. These resources will be made available

²⁷ OJ C 326, 26.10.2012, p. 391.

through redeployment in the light of the budgetary and staffing constraints for European Public Administration under the current Multiannual Financial Framework while related operational expenditure will be funded with the LIFE programme envelope. IT development and procurement choices will be performed according to the Communication on the guidelines on financing of information technology and cybersecurity, of 10 September 2020²⁸, which includes pre-approval by the European Commission Information Technology and Cybersecurity Board for certain IT expenditure.

5. OTHER ELEMENTS

• Implementation plans and monitoring, evaluation and reporting arrangements

The Commission will continue to monitor and evaluate the functioning of the EU ETS in its annual Carbon Market Report, as provided under Article 10(5) of the ETS Directive. This covers also the impacts of the current revision of the EU ETS. The Commission's annual Carbon Market Report and Member States annual report shall also apply to the sectors to which emissions trading is extended. The monitoring, reporting and verification data obtained through the regulation of the new sectors will be a key source of information for the Commission to evaluate progress in the sectors concerned.

The monitoring, reporting and verification rules for shipping should follow the rules laid down in Regulation (EU) 2015/757 of the European Parliament and of the Council, as amended by proposal COM(2019) 38 final and this proposal.

Furthermore, evaluation of progress on the application of the ETS Directive is provided for in the current Article 21 of the Directive itself²⁹.

The initiative builds on the process based on integrated national energy and climate plans and the robust transparency framework for greenhouse gas emissions and other climate information that is contained in Regulation (EU) 2018/1999 of the European Parliament and of the Council³⁰. The Commission will use *inter alia* the information submitted and reported by Member States under the Governance Regulation as a basis for its regular assessment of progress. Also, the provisions for the reporting on the use of auctioning revenues generated under this Directive are set in Regulation (EU) 2018/1999. The impacts of the changes in this Directive will need to be analysed and might require a subsequent amendment of that Regulation to ensure coherence between the two legal acts.

²⁸ C(2020) 6126.

²⁹ This article requires Member States to submit to the Commission an annual report paying particular attention to issues including the allocation of allowances, operation of the Registry, application of monitoring and reporting, verification and accreditation and issues relating to compliance.

³⁰ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).

Further details on monitoring and evaluation are provided in section 9 of the impact assessment accompanying this proposal.

- **Detailed explanation of the specific provisions of the proposal**

The main elements of the ETS Directive which are amended are the following:

Maritime Transport (Article 3, Articles 3g to 3ge, and Article 16)

The proposal extends the scope of the EU's Emissions Trading System to cover maritime transport. To this end, the proposal amends the definition of "emissions" in Article 3(b) to include emissions from ships performing a maritime transport activity, expands Chapter II of the Directive to cover "aviation and maritime transport" and adds maritime transport as a new activity in Annex I. Further, it includes new definitions for "shipping company" and "administering authority in respect of shipping companies" in Article 3(v) and Article 3(w) respectively. To expand Chapter II to maritime transport, it inserts Articles 3g to 3ge.

The extension of the EU ETS to maritime transport applies in respect of emissions from intra-EU voyages, half of the emissions from extra-EU voyages and emissions occurring at berth in an EU port; the same rules that apply to other sectors covered by the EU ETS should apply to maritime transport with regard to auctioning, the transfer, surrender and cancellation of allowances, penalties and registries (Article 16). The obligation to surrender allowances in the maritime transport sector is gradually phased-in over the period 2023 to 2025, with shipping companies having to surrender 100 % of their verified emissions as of 2026 (Article 3ga). In accordance with this phase-in, to the extent fewer allowances are surrendered in respect of verified emissions for maritime transport during those years, the amount of allowances not surrendered should be cancelled. The monitoring and reporting rules, as well as verification and accreditation rules laid out in Regulation (EU) 2015/757, as amended, shall apply (Articles 3gb and 3gc). In addition to the general EU ETS rules on penalties, expulsion orders can be issued against ships under the responsibility of a shipping company that has failed to surrender allowances for two or more consecutive reporting periods, with the result that ships under its responsibility can be detained by the flag Member State and denied entry into a port under the jurisdiction of a Member State other than the flag State (Article 16(11a)). Each shipping company falling within the scope of application of the EU ETS is attributed to a Member State – the administering authority – for its administration under the Directive. The administering authority is determined based on where the shipping company is registered. If the company is not registered in a Member State, it is attributed to the Member State where it had the highest number of port calls in the two previous monitoring years. As of 2024, the Commission is to publish and regularly update a list of shipping companies covered by the Directive and their respective administering authority (Article 3gd). Administering authorities may request the assistance of the European Maritime Safety Agency (EMSA) to carry out their obligations under this Directive, in particular as regards the approval of monitoring plans and the verification of emissions (Article 18b). Owing to its experience in the implementation of Regulation (EU) 2015/757 and its IT tools, EMSA could further assist administering authorities in implementing the Directive, for example by facilitating the exchange of information or by developing guidelines and criteria. A reporting and review clause is

included (Article 3ge) to monitor the implementation of this Chapter and to take account of relevant developments at the level of the International Maritime Organization.

Linear reduction factor and one-off cap reduction (Art. 9)

The linear reduction factor is changed to 4,2 % from the year following the entry into force of this Directive amending the ETS Directive. The increased linear reduction factor is combined with a one-off downward adjustment of the cap so the new linear reduction factor has the same effect as if it would have applied from 2021. This ensures that the overall quantity of allowances ('cap') will decline at an increased annual pace resulting in an overall emission reduction of sectors under the EU ETS of 61 % by 2030 compared to 2005. In addition, from the year following entry into force of this Directive, the cap is to be increased by an amount of allowances corresponding to the maritime transport emissions to be included in the EU ETS and derived from data from the EU Maritime transport MRV system for the years 2018 and 2019, adjusted, from year 2021, by the linear reduction factor.

Use of auction revenues (Article 10)

To address the increased needs in low-carbon investments, the provision on the use of auction revenues is amended so that Member States must use all the revenues, to the extent they are not attributed to the Union budget, for climate-related purposes, including to support low-income households' sustainable renovation. Adjustments to the EU budgetary framework will be presented by the Commission as part of the upcoming Own Resources package including a proposal to amend the multiannual financial framework.

Further, to address the distributional and social effects of the transition, the proposal provides for auctioning an additional 2,5 % of the cap to fund the energy transition of the Member States with GDP per capita below 65 % of the EU average in 2016-2018, through the Modernisation Fund.

More stringent benchmark approach and establishing conditionality for free allocation (Article 10a(1))

To reduce the possibility of applying the cross-sectoral correction factor following the adjustment of the cap, the update of the benchmarks is proposed to follow closer the emission reductions in sectors and sub-sectors, by increasing the maximum update rate to 2,5 % per year as of 2026 instead of the current 1,6 %. This approach is considered to deliver a fairer and more transparent distribution of free allocation compared to a higher cut for all sectors via the cross-sectoral correction factor.

In addition, free allocation is made conditional on decarbonisation efforts in order to incentivise the uptake of low-carbon technologies. Installations covered by the obligation to conduct an energy audit under the current Article 8(4) of the Energy Efficiency Directive ('EED') will be required to implement recommendations of the audit report, or to demonstrate the implementation of other measures which lead to greenhouse gas emission reductions equivalent to those recommended by the audit report. Otherwise, they would see their free allocation reduced. In accordance with the current Article 8(4) EED, SMEs are not subject to

an energy audit. Further, under the conditions of Article 8(6) EED, enterprises that are not SMEs and that are implementing an energy or environmental management system are exempted from the energy audit requirement. The rules determining the exemption to carry out an energy audit are proposed to change under the revised EED, from the exemption of SMEs to an exemption based on energy consumption. Such an exemption rule would also be appropriate for the conditionality of free allocation.

Carbon border adjustment measures (Article 10a(1))

A Carbon Border Adjustment Measure (CBAM) is an alternative measure to mitigate carbon leakage risks. Sectors and subsectors covered by that measure should therefore not receive free allocation. A transitional period is established to allow producers, importers and traders to adjust to the new regime, with a gradual reduction of free allocation as the CBAM is phased in. Rules are also established on the calculation of the final amount to deduct from the free allocation to be auctioned.

Carbon contracts for difference and increase of the Innovation Fund (Article 10a(8))

Carbon contracts for difference (CCDs) are an important element to trigger emission reductions in industry, offering the EU the opportunity to guarantee investors in innovative climate-friendly technologies a fixed price that rewards CO₂ emission reductions above the current price levels in the EU ETS. The scope of the Innovation Fund is extended to allow it to provide support to projects through competitive tendering mechanisms such as CCDs. In addition, the Innovation Fund is increased by 50 million allowances sourced in the same manner from the allowances available for free allocation and for auctioning as is the case for the current endowment of the Fund. As a result, 40 million allowances will stem from the allowances available for free allocation, and 10 million allowances from the allowances to be auctioned.

Modernisation Fund (Article 10d)

This proposal aligns the Modernisation Fund with the new climate objectives of the Union by requiring that investments are consistent with the objectives of the European Green Deal and the European Climate Law and by eliminating support to investments related to any fossil fuels, not only solid fossil fuels as is currently the case. In addition, the proposal: increases the percentage of the fund that needs to be invested in priority investments; gives more prominence to renewable sources and energy efficiency investments in transport, buildings, waste and agriculture; targets energy efficiency as a priority area at the demand side, including industry explicitly as eligible sector; and includes the support of households to address energy poverty.

Carbon Capture and Utilisation (Articles 3 point (b) and Article 12(3b))

The increased climate ambition will encourage making use of all the technological solutions to reduce emissions, including carbon capture and utilisation. As a result, the proposal establishes that surrender obligations do not arise for emissions of CO₂ that end up

permanently chemically bound in a product so that they do not enter the atmosphere under normal use.

Removal of barriers for innovative low-carbon technologies by modifying the EU ETS scope and benchmarks (Article 2, Article 10a and Annex I)

The EU ETS free allocation rules are amended to better support decarbonisation of energy intensive industries by the deployment of break-through technologies.

Efficient technologies just below benchmark level receive more free allocation than they emit. This puts innovative technologies outside the EU ETS at a competitive disadvantage, so investments in those technologies may be discouraged. Innovative installations can fall out of the EU ETS because they change their production process or because their total rated thermal input of the combustion units of an installation decreases to less than 20 MW.

This disincentive is addressed by: (i) specifying that installations stay within the EU ETS where they reduce the total capacity of their combustions units to reduce greenhouse gas emissions (e.g. through electrification); (ii) making the definitions of activities technology neutral (removing references to fossil fuels or specific production processes); (iii) referring to production capacities instead of combustion capacities and (iv) reviewing the benchmark definitions to ensure equal treatment of installations independently of the technology used, including when using low- or zero-carbon technologies. Maintaining innovative installations in the EU ETS will also reduce benchmark values and thus encourage greater emissions reductions.

Introduction of emissions trading for buildings and road transport (Chapter IVa)

New emissions trading for buildings and road transport should be established as a separate self-standing system from 2025 (Chapter IVa). During the first year, the regulated entities will be required to hold a greenhouse gas emissions permit and to report their emissions for years 2024 and 2025 (Articles 30b and 30f). The issuance of allowances and compliance obligations for these entities will be applicable only from 2026, which will allow the new system to start functioning in an orderly and efficient manner (Articles 30c, 30d and 30e). As there is a substantially large number of small emitters in the sectors of buildings and road transport, and for reasons of technical feasibility and administrative efficiency, the point of regulation is established not with the emitters, but further upstream the supply chain (Article 30b and Annex III). Therefore, the release for consumption of fuels which are used for combustion in the sectors of buildings and road transport will be the activity regulated for the new system (Annex III). The scope of the sectors of buildings and road transport is defined on the basis of relevant sources of emissions included in [2006 IPCC Guidelines for National Greenhouse Gas Inventories \(Annex III\)](#). The regulated entities are defined in line with the system of excise duty of Council Directive (EU) 2020/262³¹, since a robust monitoring and reporting mechanism for the quantities of fuels released for consumption already exists for tax purposes

³¹ Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (recast) (OJ L 58, 27.2.2020, p. 4-42).

under that Directive. The monitoring, reporting and verification obligations in the sectors of buildings and road transport will be aligned to the extent possible with the well-functioning mechanisms established for stationary installations and aviation (Article 30(f)).

The emissions cap for the new emissions trading system will be set from 2026 based on data collected under the Effort Sharing Regulation and ambition level and decrease to reach emission reductions of 43 % in 2030 compared to 2005 for the sectors of buildings and road transport (Article 30c and Annex IIIa). A corresponding linear reduction factor is defined. Once the monitoring and reporting of the new emissions trading is established, the total quantity of allowances for 2028 will be adjusted on the basis of the available MRV data for the period 2024 to 2026. The linear reduction factor will be revised only if the MRV data is significantly higher than the initial cap, and not due to small-scale differences with EU UNFCCC inventory data.

The allowances for the new emissions trading will be auctioned as no free allocation is provided (Article 30d). In order to ensure a smooth start of emissions trading in the new sectors, a certain amount of allowances will be front-loaded (first subparagraph of Article 30d(2)). In addition, to ensure market stability from the start a Market Stability Reserve will also operate in the sectors concerned based on specific rules (second subparagraph of Article 30d(2)). As the system is new, mitigation measures are established in order to address the potential risk of excessive price volatility, which might be particularly high at the start of emissions trading in the new sectors (Article 30h).

In order to address some of the transitional and social challenges from the carbon pricing in the new sectors, as well as to ensure targeted support for innovation, emissions trading for road transport and buildings will also contribute to the already existing low-carbon funds. Thus, 150 million allowances issued under the new emissions trading system for road transport and buildings will be made available to the Innovation Fund to stimulate the green transition (Article 30d(4)).

The Commission will monitor the application of the rules of the new emissions trading and, if necessary, it will propose a review by 1 January 2028 to improve its effectiveness, administration and practical application (Article 30i).

The main elements of the MSR Decision amended through the proposal are the following:

Taking into account net demand from aviation (Article 1(4a)) and the maritime sector

The proposal amends the calculation of the total number of allowances in circulation so that it includes aviation emissions, and allowances issued in respect of aviation. Regulation (EU) 2017/2392 of the European Parliament and of the Council³² amended Article 12(3) of the EU ETS Directive to allow all operators to use all allowances that are issued for their surrender obligations, including aviation allowances. The accuracy and the efficacy of the reserve as a

³²

[Regulation \(EU\) 2017/2392 of the European Parliament and of the Council of 13 December 2017 amending Directive 2003/87/EC to continue current limitations of scope for aviation activities and to prepare to implement a global market-based measure from 2021 \(OJ L 350, 29.12.2017, p. 7–14\).](#)

measure of the market's stability through its supply and demand will be improved by including aviation allowances in the calculation of the reserve, while preserving its environmental integrity. If this proposal to amend the EU ETS is adopted, aviation emissions and allowances will be counted into the total number of allowances in circulation where they occurred, or were issued, as of the year following the entry into force of this amendment. Although there are no separate maritime allowances, the text also needs to be modified to include allowances and emissions in relation to the maritime sector in the calculation, as the text currently only refers to emissions and allowances for installations. To avoid distortion from the phase-in of requirements for maritime transport, the difference between verified emissions and allowances surrendered for the maritime sector, which will be cancelled rather than auctioned, will be counted in the total number of allowances in circulation as if the allowances had been issued.³³

Intake rate (Article 1(5))

The intake rate is amended in order to address the 'threshold effect' that would take place when the total number of allowances in circulation (the TNAC) is very close to the upper threshold. In that case, one allowance more or less in the TNAC may trigger or not intakes, depending on whether the TNAC is above or below the threshold. Uncertainty about this happening or not risks creating price volatility on the market.

The proposal modifies the mechanism of the intake rate. It proposes a buffer market stability reserve (MSR) intake when the TNAC is between 833 million and 1096 million. In that case, the intake will be the difference between the TNAC and the 833 million threshold. As long as the TNAC is above 1096 million allowances, the normal intake rate would apply (24 % until 2030).

The reason for choosing the figure of 1096 million allowances is that, at that amount, the 24 % intake and the difference between the TNAC and the upper threshold are close to each other. This addresses the threshold effect, all the while maintaining an efficient MSR intake if the TNAC is higher.

Definition of the total number of allowances in circulation (TNAC) (Article 1(5))

When calculating the TNAC, the formula will specify that only allowances issued and not put in reserve are included in the supply of allowances, and the number of allowances in the reserve is no longer subtracted from the supply of allowances. This change makes the calculation of the total number of allowances in circulation clearer, and has no material impact on its result, including on the past calculations of the TNAC.

Invalidation mechanism (Article 1(5a))

³³ In a similar manner to the accounting of the Member States' flexibilities to access allowances from the EU ETS, which are taken into account for the calculation of the total number of allowances in circulation, as set out in Article 6(2) of Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26–42).

As of 2023, allowances in the market stability reserve (MSR) above the level of auction volumes of the previous year are invalidated. However, the level of auction volumes of the previous year depends on various elements, such as the cap and the operation of the MSR itself. In order to ensure that the level of allowances that remains in the reserve after the invalidation is more predictable, it is proposed to limit the number of allowances in the reserve at a level of 400 million allowances. This value also corresponds to the lower threshold for the value of the TNAC, below which allowances are released from the MSR.

Market stability reserve (MSR) for the emissions trading for road transport and buildings (Article 1a)

To address the risk of an imbalance between supply and demand, a Market Stability Reserve will also operate for the new emissions trading for road transport and buildings, with allowance intakes and releases based on the thresholds for the surplus of allowances in that market. Moreover, to allow that the MSR can operate as an effective tool to address imbalances on the market from the start of emissions trading in the two sectors, a number of allowances for the new sectors will be created in the reserve. In order to address the potential risk of excessive price volatility, measures are established to allow for release of additional allowances from the MSR. However the triggering mechanism for this additional release will be based on the increase in the average allowance price and not on the surplus of allowances in the market.

The main elements of Regulation (EU) 2015/757, known as the MRV Regulation, which are amended through this proposal are the following:

The proposal introduces new definitions of ‘administering authority’ and ‘aggregated emissions data at company level’. In addition, the proposed amendments oblige companies to submit their monitoring plans to the responsible administering authorities for approval (amended Articles 6 and 7), to report aggregated emissions data at company level (amended Article 4) and, following the verification of the aggregated emissions data at company level (amended Articles 13 to 16), to submit these verified aggregated data to the responsible administering authority (new Article 11a and amended Article 12). The verifier has no obligation to verify the emissions report at ship level and report referred to in Article 11(2) of Regulation (EU) 2015/757, as these reports at ship level have already been verified. The proposal also confers to the Commission the power to adopt delegated acts to amend the monitoring methods and rules to make them fit for emissions trading (amended article 5(2)) and to supplement Regulation (EU) 2015/757 with the rules for the approval of monitoring plans and changes thereof by administering authorities, the rules for the monitoring, reporting and submission of the aggregated emissions data at company level (Articles 6(8), 7(5) and 11a(4)), and the rules for the verification of the aggregated emissions data at company level and for the issuance of a verification report in respect of the aggregated emissions data at company level (Articles 13(6) and 15(6)).

In proposing to amend the MRV Regulation, this proposal complements Commission proposal COM(2019) 38 final.

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and Regulation (EU) 2015/757

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,
Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee¹,

Having regard to the opinion of the Committee of the Regions²,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) The Paris Agreement, adopted in December 2015 under the United Nations Framework Convention on Climate Change (UNFCCC) entered into force in November 2016 (“the Paris Agreement”)³. Its Parties have agreed to hold the increase in the global average temperature well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1,5 °C above pre-industrial levels.
- (2) Tackling climate and environmental-related challenges and reaching the objectives of the Paris Agreement are at the core of the Communication on “The European Green Deal”, adopted by the Commission on 11 December 2019⁴.
- (3) The European Green Deal combines a comprehensive set of mutually reinforcing measures and initiatives aimed at achieving climate neutrality in the EU by 2050, and sets out a new growth strategy that aims to transform the Union into a fair and prosperous society, with a modern, resource-efficient and competitive economy, where economic growth is decoupled from resource use. It also aims to protect, conserve and enhance the Union's natural capital, and protect the health and well-being of citizens from environment-related risks and impacts. At the same time, this transition affects women and men differently and has a particular impact on some disadvantaged

¹ OJ C , , p. .

² OJ C , , p. .

³ Paris Agreement (OJ L 282, 19.10.2016, p. 4).

⁴ COM(2019)640 final.

groups, such as older people, persons with disabilities and persons with a minority racial or ethnic background. It must therefore be ensured that the transition is just and inclusive, leaving no one behind.

- (4) The necessity and value of the European Green Deal have only grown in light of the very severe effects of the COVID-19 pandemic on the health, living and working conditions and well-being of the Union's citizens, which have shown that our society and our economy need to improve their resilience to external shocks and act early to prevent or mitigate them. European citizens continue to express strong views that this applies in particular to climate change⁵.
- (5) The Union committed to reduce to reduce the Union's economy-wide net greenhouse gas emissions by at least 55 % by 2030 below 1990 levels in the updated nationally determined contribution submitted to the UNFCCC Secretariat on 17 December 2020⁶.
- (6) In Regulation (EU) 2021/1119 of the European Parliament and of the Council⁷ the Union has enshrined the target of economy-wide climate neutrality by 2050 in legislation. That Regulation also establishes a binding Union domestic reduction commitment of net greenhouse gas emissions (emissions after deduction of removals) of at least 55 % below 1990 levels by 2030.
- (7) All sectors of the economy need to contribute to achieving those emission reductions. Therefore, the ambition of the EU Emissions Trading System (EU ETS), established by Directive 2003/87/EC of the European Parliament and of the Council⁸ to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner, should be increased in a manner commensurate with this economy-wide net greenhouse gas emissions reduction target for 2030.
- (8) The EU ETS should incentivise production from installations that partly or fully reduce greenhouse gas emissions. Therefore, the description of some categories of activities in Annex I to Directive 2003/87/EC should be amended to ensure an equal treatment of installations in the sectors concerned. In addition, free allocation for the production of a product should be independent of the nature of the production process. It is therefore necessary to modify the definition of the products and of the processes and emissions covered for some benchmarks to ensure a level playing field for new and existing technologies. It is also necessary to decouple the update of the benchmark values for refineries and for hydrogen to reflect the increasing importance of production of hydrogen outside the refineries sector.
- (9) Council Directive 96/61/EC⁹ was repealed by Directive 2010/75/EU of the European Parliament and of the Council¹⁰. The references to Directive 96/61/EC in Article 2 of

⁵ Special Eurobarometer 513 on Climate Change, 2021 (https://ec.europa.eu/clima/citizens/support_en).

⁶ https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/European%20Union%20First/EU_NDC_Submission_December%202020.pdf

⁷ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1).

⁸ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32).

⁹ Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control (OJ L 257, 10.10.1996, p. 26).

Directive 2003/87/EC and in its Annex IV should be updated accordingly. Given the need for urgent economy-wide emission reductions, Member States should be able to act to reduce greenhouse gas emissions that are under the scope of the EU ETS through other policies than emission limits adopted pursuant to Directive 2010/75/EU.

- (10) In its Communication 'Pathway to a Healthy Planet for All'¹¹, the Commission calls for steering the EU towards zero pollution by 2050, by reducing pollution across air, freshwaters, seas and soils to levels which are no longer expected to be harmful for health and natural ecosystems. Measures under Directive 2010/75/EU, as the main instrument regulating air, water and soil pollutant emissions, will often also enable emissions greenhouse gases to be reduced. In line with Article 8 of Directive 2003/87/EC, Member States should ensure coordination between the permit requirements of Directive 2003/87/EC and those of Directive 2010/75/EU.
- (11) Recognising that new innovative technologies will often allow reducing emissions of both greenhouse gases and pollutants, it is important to ensure synergies between policies delivering reductions of emissions of both greenhouse gases and pollutants, namely Directive 2010/75/EU, and review their effectiveness in this regard.
- (12) The definition of electricity generators was used to determine the maximum amount of free allocation to industry in the period from 2013 to 2020, but led to different treatment of cogeneration power plants compared to industrial installations. In order to incentivise the use of high efficiency cogeneration and to ensure equal treatment of all installations receiving free allocation for heat production and district heating, all references to electricity generators in Directive 2003/87/EC should be deleted. In addition, Commission Delegated Regulation (EU) 2019/331¹² specifies the eligibility of all industrial processes for free allocation. Therefore, the provisions on carbon capture and storage in Article 10a(3) of Directive 2003/87/EC have become obsolete and should be deleted.
- (13) Greenhouse gases that are not directly released into the atmosphere should be considered emissions under the EU ETS and allowances should be surrendered for those emissions unless they are stored in a storage site in accordance with Directive 2009/31/EC of the European Parliament and of the Council¹³, or they are permanently chemically bound in a product so that they do not enter the atmosphere under normal use. The Commission should be empowered to adopt implementing acts specifying the conditions where greenhouse gases are to be considered as permanently chemically bound in a product so that they do not enter the atmosphere under normal use, including obtaining a carbon removal certificate, where appropriate, in view of regulatory developments with regard to the certification of carbon removals.

¹⁰ [Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions \(integrated pollution prevention and control\) OJ L 334, 17.12.2010, p. 17.](#)

¹¹ Communication from the Commission to the European Parliament, the Council, the European Economic And Social Committee and the Committee of the Regions Pathway to a Healthy Planet for All, EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil' (COM/2021/400 final).

¹² Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 59, 27.2.2019, p. 8).

¹³ Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006 (OJ L 140, 5.6.2009, p. 114).

- (14) International maritime transport activity, consisting of voyages between ports under the jurisdiction of two different Member States or between a port under the jurisdiction of a Member State and a port outside the jurisdiction of any Member State, has been the only means of transportation not included in the Union's past commitments to reduce greenhouse gas emissions. Emissions from fuel sold in the Union for journeys that depart in one Member State and arrive in a different Member State or a third country have grown by around 36 % since 1990. Those emissions represent close to 90 % of all Union navigation emissions as emissions from fuel sold in the Union for journeys departing and arriving in the same Member State have been reduced by 26 % since 1990. In a business-as-usual scenario, emissions from international maritime transport activities are projected to grow by around 14 % between 2015 and 2030 and 34 % between 2015 and 2050. If the climate change impact of maritime transport activities grows as projected, it would significantly undermine reductions made by other sectors to combat climate change.
- (15) In 2013, the Commission adopted a strategy for progressively integrating maritime emissions into the Union's policy for reducing greenhouse gas emissions. As a first step in this approach, the Union established a system to monitor, report and verify emissions from maritime transport in Regulation (EU) 2015/757 of the European Parliament and of the Council¹⁴, to be followed by the laying down of reduction targets for the maritime sector and the application of a market based measure. In line with the commitment of the co-legislators expressed in Directive (EU) 2018/410 of the European Parliament and of the Council¹⁵, action by the International Maritime Organization (IMO) or the Union should start from 2023, including preparatory work on adoption and implementation of a measure ensuring that the sector duly contributes to the efforts needed to achieve the objectives agreed under the Paris Agreement and due consideration being given by all stakeholders.
- (16) Pursuant to Directive (EU) 2018/410, the Commission should report to the European Parliament and to the Council on the progress achieved in the IMO towards an ambitious emission reduction objective, and on accompanying measures to ensure that the maritime transport sector duly contributes to the efforts needed to achieve the objectives agreed under the Paris Agreement. Efforts to limit global maritime emissions through the IMO are under way and should be encouraged. However, while the recent progress achieved through the IMO is welcome, these measures will not be sufficient to achieve the objectives of the Paris Agreement.
- (17) In the European Green Deal, the Commission stated its intention to take additional measures to address greenhouse gas emissions from the maritime transport sector through a basket of measures to enable the Union to reach its emissions reduction targets. In this context, Directive 2003/87/EC should be amended to include the maritime transport sector in the EU ETS in order to ensure this sector contributes to the increased climate objectives of the Union as well as to the objectives of the Paris Agreement, which requires developed countries to take the lead by undertaking economy-wide emission reduction targets, while developing countries are encouraged

¹⁴ Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC (OJ L 123, 19.5.2015, p. 55).

¹⁵ Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 (OJ L 76, 19.3.2018, p. 3).

to move over time towards economy-wide emission reduction or limitation targets.¹⁶ Considering that emissions from international aviation outside Europe should be capped from January 2021 by global market-based action while there is no action in place that caps or prices maritime transport emissions, it is appropriate that the EU ETS covers a share of the emissions from voyages between a port under the jurisdiction of a Member State and port under the jurisdiction of a third country, with the third country being able to decide on appropriate action in respect of the other share of emissions. The extension of the EU ETS to the maritime transport sector should thus include half of the emissions from ships performing voyages arriving at a port under the jurisdiction of a Member State from a port outside the jurisdiction of a Member State, half of the emissions from ships performing voyages departing from a port under the jurisdiction of a Member State and arriving at a port outside the jurisdiction of a Member State, emissions from ships performing voyages arriving at a port under the jurisdiction of a Member State from a port under the jurisdiction of a Member State, and emissions at berth in a port under the jurisdiction of a Member State. This approach has been noted as a practical way to solve the issue of Common but Differentiated Responsibilities and Capabilities, which has been a longstanding challenge in the UNFCCC context. The coverage of a share of the emissions from both incoming and outgoing voyages between the Union and third countries ensures the effectiveness of the EU ETS, notably by increasing the environmental impact of the measure compared to a geographical scope limited to voyages within the EU, while limiting the risk of evasive port calls and the risk of delocalisation of transshipment activities outside the Union. To ensure a smooth inclusion of the sector in the EU ETS, the surrendering of allowances by shipping companies should be gradually increased with respect to verified emissions reported for the period 2023 to 2025. To protect the environmental integrity of the system, to the extent that fewer allowances are surrendered in respect of verified emissions for maritime transport during those years, once the difference between verified emissions and allowances surrendered has been established each year, a corresponding number of allowances should be cancelled. As from 2026, shipping companies should surrender the number of allowances corresponding to all of their verified emissions reported in the preceding year.

- (18) The provisions of Directive 2003/87/EC as regards maritime transport activities should be kept under review in light of future international developments and efforts undertaken to achieve the objectives of the Paris Agreement, including the second global stocktake in 2028, and subsequent global stocktakes every five years thereafter, intended to inform successive nationally determined contributions. In particular, the Commission should report any time before the second global stocktake in 2028 - and therefore no later than by 30 September 2028 - to the European Parliament and to the Council on progress in the IMO negotiations concerning a global market-based measure. In its report, the Commission should analyse the International Maritime Organization instruments and, assess, as relevant, how to implement those instruments in Union law through a revision of Directive 2003/87/EC. In its report, the Commission should include proposals as appropriate.
- (19) The Commission should review the functioning of Directive 2003/87/EC in relation to maritime transport activities in the light of experience of its application, including in relation to possible evasive practices, and should then propose measures to ensure its effectiveness.

¹⁶

Paris Agreement, Article 4(4).

- (20) The person or organisation responsible for the compliance with the EU ETS should be the shipping company, defined as the shipowner or any other organisation or person, such as the manager or the bareboat charterer, that has assumed the responsibility for the operation of the ship from the shipowner and that, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention. This definition is based on the definition of ‘company’ in Article 3, point (d) of Regulation (EU) 2015/757, and in line with the global data collection system established in 2016 by the IMO. In line with the polluter pays principle, the shipping company could, by means of a contractual arrangement, hold the entity that is directly responsible for the decisions affecting the CO₂ emissions of the ship accountable for the compliance costs under this Directive. This entity would normally be the entity that is responsible for the choice of fuel, route and speed of the ship.
- (21) In order to reduce the administrative burden on shipping companies, one Member State should be responsible for each shipping company. The Commission should publish an initial list of shipping companies that performed a maritime activity falling within the scope of the EU ETS, which specifies the administering authority in respect of each shipping company. The list should be updated at least every two years to reattribute shipping companies to another administering authority as relevant. For shipping companies registered in a Member State, the administering authority should be that Member State. For shipping companies registered in a third country, the administering authority should be the Member State in which the shipping company had the greatest estimated number of port calls from voyages falling within the scope of Directive 2003/87/EC in the last two monitoring years. For shipping companies registered in a third country and which did not perform any voyage falling within the scope of Directive 2003/87/EC in the last two monitoring years, the administering authority should be the Member State from where the shipping company started its first voyage falling within the scope of that Directive. The Commission should publish and update on a biennial basis a list of shipping companies falling within the scope of Directive 2003/87/EC specifying the administering authority for each shipping company. In order to ensure equal treatment of shipping companies, Member States should follow harmonised rules for the administration of shipping companies for which they have responsibility, in accordance with detailed rules to be established by the Commission.
- (22) Member States should ensure that the shipping companies that they administer comply with the requirements of Directive 2003/87/EC. In the event that a shipping company fails to comply with those requirements and any enforcement measures taken by the administering authority have failed to ensure compliance, Member States should act in solidarity. As a last resort measure, Member States should be able to refuse entry to the ships under the responsibility of the shipping company concerned, except for the Member State whose flag the ship is flying, which should be able to detain that ship.
- (23) Shipping companies should monitor and report their aggregated emissions data from maritime transport activities at company level in accordance with the rules laid down in Regulation (EU) 2015/757. The reports on aggregated emissions data at company level should be verified in accordance with the rules laid down in that Regulation. When performing the verifications at company level, the verifier should not verify the emissions report at ship level and the report referred to in Article 11(2) of that Regulation, as those reports at ship level would have been already verified.

- (24) Based on experience from similar tasks related to environmental protection, the European Maritime Safety Agency (EMSA) or another relevant organisation should, as appropriate and in accordance with its mandate, assist the Commission and the administering authorities in respect of the implementation of Directive 2003/87/EC. Owing to its experience with the implementation of Regulation (EU) 2015/757 and its IT tools, EMSA could assist the administering authorities notably as regards the monitoring, reporting and verification of emissions generated by maritime activities under the scope of this Directive by facilitating the exchange of information or developing guidelines and criteria.
- (25) Regulation (EU) 2017/2392 of the European Parliament and of the Council¹⁷ amended Article 12(3) of Directive 2003/87/EC to allow all operators to use all allowances that are issued. The requirement for greenhouse gas emissions permits to contain an obligation to surrender allowances, pursuant to Article 6(2), point (e), of that Directive, should be aligned accordingly.
- (26) Achieving the Union's emissions reduction target for 2030 will require a reduction in the emissions of the sectors covered by the EU ETS of 61 % compared to 2005. The Union-wide quantity of allowances of the EU ETS needs to be reduced to create the necessary long-term carbon price signal and drive for this degree of decarbonisation. To this end, the linear reduction factor should be increased, also taking into account the inclusion of emissions from maritime transport. The latter should be derived from the emissions from maritime transport activities reported in accordance with Regulation (EU) 2015/757 for 2018 and 2019 in the Union, adjusted, from year 2021, by the linear reduction factor.
- (27) Bearing in mind that this Directive amends Directive 2003/87/EC in respect of a period of implementation that has already started on 1 January 2021, for reasons of predictability, environmental effectiveness and simplicity, the steeper linear reduction pathway of the EU ETS should be a straight line from 2021 to 2030, such as to achieve emission reductions in the EU ETS of 61 % by 2030, as the appropriate intermediate step towards Union economy-wide climate neutrality in 2050. As the increased linear reduction factor can only apply from the year following the entry into force of this Directive, a one-off reduction of the quantity of allowances should reduce the total quantity of allowances so that it is in line with this level of annual reduction having been made from 2021 onwards.
- (28) Achieving the increased climate ambition will require substantial public resources in the EU as well as national budgets to be dedicated to the climate transition. To complement and reinforce the substantial climate-related spending in the EU budget, all auction revenues that are not attributed to the Union budget should be used for climate-related purposes. This includes the use for financial support to address social aspects in lower- and middle-income households by reducing distortive taxes. Further, to address distributional and social effects of the transition in low-income Member States, an additional amount of 2,5 % of the Union-wide quantity of allowances from [year of entry into force of the Directive] to 2030 should be used to fund the energy transition of the Member States with a gross domestic product (GDP) per capita below

¹⁷

[Regulation \(EU\) 2017/2392 of the European Parliament and of the Council of 13 December 2017 amending Directive 2003/87/EC to continue current limitations of scope for aviation activities and to prepare to implement a global market-based measure from 2021 \(OJ L 350, 29.12.2017, p. 7\).](#)

65 % of the Union average in 2016-2018, through the Modernisation Fund referred to in Article 10d of Directive 2003/87/EC.

- (29) Further incentives to reduce greenhouse gas emissions by using cost-efficient techniques should be provided. To that end, the free allocation of emission allowances to stationary installations from 2026 onwards should be conditional on investments in techniques to increase energy efficiency and reduce emissions. Ensuring that this is focused on larger energy users would result in a substantial reduction in burden for businesses with lower energy use, which may be owned by small and medium sized enterprises or micro-enterprises. [Reference to be confirmed with the revised EED]. The relevant delegated acts should be adjusted accordingly.
- (30) The Carbon Border Adjustment Mechanism (CBAM), established under Regulation (EU) [.../..] of the European Parliament and of the Council¹⁸, is an alternative to free allocation to address the risk of carbon leakage. To the extent that sectors and subsectors are covered by that measure, they should not receive free allocation. However, a transitional phasing-out of free allowances is needed to allow producers, importers and traders to adjust to the new regime. The reduction of free allocation should be implemented by applying a factor to free allocation for CBAM sectors, while the CBAM is phased in. This percentage (CBAM factor) should be equal to 100 % during the transitional period between the entry into force of [CBAM Regulation] and 2025, 90 % in 2026 and should be reduced by 10 percentage points each year to reach 0 % and thereby eliminate free allocation by the tenth year. The relevant delegated acts on free allocation should be adjusted accordingly for the sectors and subsectors covered by the CBAM. The free allocation no longer provided to the CBAM sectors based on this calculation (CBAM demand) must be auctioned and the revenues will accrue to the Innovation Fund, so as to support innovation in low carbon technologies, carbon capture and utilisation ('CCU'), carbon capture and geological storage ('CCS'), renewable energy and energy storage, in a way that contributes to mitigating climate change. Special attention should be given to projects in CBAM sectors. To respect the proportion of the free allocation available for the non-CBAM sectors, the final amount to deduct from the free allocation and to be auctioned should be calculated based on the proportion that the CBAM demand represents in respect of the free allocation needs of all sectors receiving free allocation.
- (31) In order to better reflect technological progress and adjust the corresponding benchmark values to the relevant period of allocation while ensuring emission reduction incentives and properly rewarding innovation, the maximum adjustment of the benchmark values should be increased from 1,6 % to 2,5 % per year. For the period from 2026 to 2030, the benchmark values should thus be adjusted within a range of 4 % to 50 % compared to the value applicable in the period from 2013 to 2020.
- (32) A comprehensive approach to innovation is essential for achieving the European Green Deal objectives. At EU level, the necessary research and innovation efforts are supported, among others, through Horizon Europe which include significant funding and new instruments for the sectors coming under the ETS. Member States should ensure that the national transposition provisions do not hamper innovations and are technologically neutral.

¹⁸ [please insert full OJ reference]

- (33) The scope of the Innovation Fund referred to in Article 10a(8) of Directive 2003/87/EC should be extended to support innovation in low-carbon technologies and processes that concern the consumption of fuels in the sectors of buildings and road transport. In addition, the Innovation Fund should serve to support investments to decarbonise the maritime transport sector, including investments in sustainable alternative fuels, such as hydrogen and ammonia that are produced from renewables, as well as zero-emission propulsion technologies like wind technologies. Considering that revenues generated from penalties raised in Regulation xxxx/xxxx [FuelEU Maritime]¹⁹ are allocated to the Innovation Fund as external assigned revenue in accordance with Article 21(5) of the Financial Regulation, the Commission should ensure that due consideration is given to support for innovative projects aimed at accelerating the development and deployment of renewable and low carbon fuels in the maritime sector, as specified in Article 21(1) of Regulation xxxx/xxxx [FuelEU Maritime]. To ensure sufficient funding is available for innovation within this extended scope, the Innovation Fund should be supplemented with 50 million allowances, stemming partly from the allowances that could otherwise be auctioned, and partly from the allowances that could otherwise be allocated for free, in accordance with the current proportion of funding provided from each source to the Innovation Fund.
- (34) Pursuant to Article 10 of Commission Regulation (EU) No 2019/1122²⁰, where aircraft operators no longer operate flights covered by the EU ETS, their accounts are set to excluded status, and processes may no longer be initiated from those accounts. To preserve the environmental integrity of the system, allowances which are not issued to aircraft operators due to their closure should be used to cover any shortfall in surrenders by those operators, and any leftover allowances should be used to accelerate action to tackle climate change by being placed in the Innovation Fund.
- (35) Carbon Contracts for Difference (CCDs) are an important element to trigger emission reductions in industry, offering the opportunity to guarantee investors in innovative climate-friendly technologies a price that rewards CO₂ emission reductions above those induced by the current price levels in the EU ETS. The range of measures that the Innovation Fund can support should be extended to provide support to projects through price-competitive tendering, such as CCDs. The Commission should be empowered to adopt delegated acts on the precise rules for this type of support.
- (36) Where an installation's activity is temporarily suspended, free allocation is adjusted to the activity levels which are mandatorily reported annually. In addition, competent authorities can suspend the issuance of emission allowances to installations that have suspended operations as long as there is no evidence that they will resume operations. Therefore, operators should no longer be required to demonstrate to the competent authority that their installation will resume production within a specified and reasonable time in case of a temporary suspension of the activities.
- (37) Corrections of free allocation granted to stationary installations pursuant to Article 11(2) of Directive 2003/87/EC can require granting additional free allowances or

¹⁹ [add ref to the FuelEU Maritime Regulation].

²⁰ [Commission Delegated Regulation \(EU\) 2019/1122 of 12 March 2019 supplementing Directive 2003/87/EC of the European Parliament and of the Council as regards the functioning of the Union Registry \(OJ L 177, 2.7.2019, p. 3\).](#)

transferring back surplus allowances. The allowances set aside for new entrants under Article 10a(7) of Directive 2003/87/EC should be used for those purposes.

- (38) The scope of the Modernisation Fund should be aligned with the most recent climate objectives of the Union by requiring that investments are consistent with the objectives of the European Green Deal and Regulation (EU) 2021/1119, and eliminating the support to any investments related to fossil fuels. In addition, the percentage of the Modernisation Fund that needs to be devoted to priority investments should be increased to 80 %; energy efficiency should be targeted as a priority area at the demand side; and support of households to address energy poverty, including in rural and remote areas, should be included within the scope of the priority investments.
- (39) Commission Implementing Regulation (EU) 2018/2066²¹ lays down rules on the monitoring of emissions from biomass which are consistent with the rules on the use of biomass laid down in the Union legislation on renewable energy. As the legislation becomes more elaborate on the sustainability criteria for biomass with the latest rules established in Directive (EU) 2018/2001 of the European Parliament and of the Council²², the conferral of implementing powers in Article 14(1) of Directive 2003/87/EC should be explicitly extended to the adoption of the necessary adjustments for the application in the EU ETS of sustainability criteria for biomass, including biofuels, bioliquids and biomass fuels. In addition, the Commission should be empowered to adopt implementing acts to specify how to account for the storage of emissions from mixes of zero-rated biomass and biomass that is not from zero-rated sources.
- (40) Renewable liquid and gaseous fuels of non-biological origin and recycled carbon fuels can be important to reduce greenhouse gas emissions in sectors that are hard to decarbonise. Where recycled carbon fuels and renewable liquid and gaseous fuels of non-biological origin are produced from captured carbon dioxide under an activity covered by this Directive, the emissions should be accounted under that activity. To ensure that renewable fuels of non-biological origin and recycled carbon fuels contribute to greenhouse gas emission reductions and to avoid double counting for fuels that do so, it is appropriate to explicitly extend the empowerment in Article 14(1) to the adoption by the Commission of implementing acts laying down the necessary adjustments for how to account for the eventual release of carbon dioxide and how to avoid double counting to ensure appropriate incentives are in place, taking also into account the treatment of these fuels under Directive (EU) 2018/2001.
- (41) As carbon dioxide is also expected to be transported by means other than pipelines, such as by ship and by truck, the current coverage in Annex I to Directive 2003/87/EC for transport of greenhouse gases for the purpose of storage should be extended to all means of transport for reasons of equal treatment and irrespective of whether the means of transport are covered by the EU ETS. Where the emissions from the transport are also covered by another activity under Directive 2003/87/EC, the emissions should be accounted for under that other activity to prevent double counting.

²¹ Commission Implementing Regulation (EU) 2018/2066 of 19 December 2018 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 601/2012 (OJ L 334, 31.12.2018, p. 1).

²² Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82).

- (42) The exclusion of installations using exclusively biomass from the EU ETS has led to situations where installations combusting a high share of biomass have obtained windfall profits by receiving free allowances greatly exceeding actual emissions. Therefore, a threshold value for zero-rated biomass combustion should be introduced above which installations are excluded from the EU ETS. The threshold value of 95 % is in line with the uncertainty parameter set out in Article 2(16) of Commission Delegated Regulation (EU) 2019/331²³.
- (43) The Communication of the Commission on Stepping up Europe's 2030 climate ambition²⁴, underlined the particular challenge to reduce the emissions in the sectors of road transport and buildings. Therefore, the Commission announced that a further expansion of emissions trading could include emissions from road transport and buildings. Emissions trading for these two new sectors would be established through separate but adjacent emissions trading. This would avoid any disturbance of the well-functioning emissions trading in the sectors of stationary installations and aviation. The new system is accompanied by complementary policies and measures safeguarding against undue price impacts, shaping expectations of market participants and aiming for a carbon price signal for the whole economy. Previous experience has shown that the development of the new market requires setting up an efficient monitoring, reporting and verification system. In view of ensuring synergies and coherence with the existing Union infrastructure for the EU ETS covering the emissions from stationary installations and aviation, it is appropriate to set up emissions trading for the road transport and buildings sectors via an amendment to Directive 2003/87/EC.
- (44) In order to establish the necessary implementation framework and to provide a reasonable timeframe for reaching the 2030 target, emissions trading in the two new sectors should start in 2025. During the first year, the regulated entities should be required to hold a greenhouse gas emissions permit and to report their emissions for the years 2024 and 2025. The issuance of allowances and compliance obligations for these entities should be applicable as from 2026. This sequencing will allow starting emissions trading in the sectors in an orderly and efficient manner. It would also allow the EU funding and Member State measures to be in place to ensure a socially fair introduction of the EU emissions trading into the two sectors so as to mitigate the impact of the carbon price on vulnerable households and transport users.
- (45) Due to the very large number of small emitters in the sectors of buildings and road transport, it is not possible to establish the point of regulation at the level of entities directly emitting greenhouse gases, as is the case for stationary installations and aviation. Therefore, for reasons of technical feasibility and administrative efficiency, it is more appropriate to establish the point of regulation further upstream in the supply chain. The act that triggers the compliance obligation under the new emissions trading should be the release for consumption of fuels which are used for combustion in the sectors of buildings and road transport, including for combustion in road transport of greenhouse gases for geological storage. To avoid double coverage, the release for consumption of fuels which are used in other activities under Annex I to Directive 2003/87/EC should not be covered.

²³ Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council (OJ L 59, 27.2.2019, p. 8).

²⁴ COM(2020)562 final.

- (46) The regulated entities in the two new sectors and the point of regulation should be defined in line with the system of excise duty established by Council Directive (EU) 2020/262²⁵, with the necessary adaptations, as that Directive already sets a robust control system for all quantities of fuels released for consumption for the purposes of paying excise duties. End-users of fuels in those sectors should not be subject to obligations under Directive 2003/87/EC.
- (47) The regulated entities falling within the scope of the emissions trading in the sectors of buildings and road transport should be subject to similar greenhouse gas emissions permit requirements as the operators of stationary installations. It is necessary to establish rules on permit applications, conditions for permit issuance, content, and review, and any changes related to the regulated entity. In order for the new system to start in an orderly manner, Member States should ensure that regulated entities falling within the scope of the new emissions trading have a valid permit as of the start of the system in 2025.
- (48) The total quantity of allowances for the new emissions trading should follow a linear trajectory to reach the 2030 emissions reduction target, taking into account the cost-efficient contribution of buildings and road transport of 43 % emission reductions by 2030 compared to 2005. The total quantity of allowances should be established for the first time in 2026, to follow a trajectory starting in 2024 from the value of the 2024 emissions limits (1 109 304 000 CO₂t), calculated in accordance with Article 4(2) of Regulation (EU) 2018/842 of the European Parliament and of the Council²⁶ on the basis of the reference emissions for these sectors for the period from 2016 to 2018. Accordingly, the linear reduction factor should be set at 5,15 %. From 2028, the total quantity of allowances should be set on the basis of the average reported emissions for the years 2024, 2025 and 2026, and should decrease by the same absolute annual reduction as set from 2024, which corresponds to a 5,43 % linear reduction factor compared to the comparable 2025 value of the above defined trajectory. If those emissions are significantly higher than this trajectory value and if this divergence is not due to small-scale differences in emission measurement methodologies, the linear reduction factor should be adjusted to reach the required emissions reduction in 2030.
- (49) The auctioning of allowances is the simplest and the most economically efficient method for allocating emission allowances, which also avoids windfall profits. Both the buildings and road transport sectors are under relatively small or non-existent competitive pressure from outside the Union and are not exposed to a risk of carbon leakage. Therefore, allowances for buildings and road transport should only be allocated via auctioning without there being any free allocation.
- (50) In order to ensure a smooth start to emissions trading in the buildings and road transport sectors and taking into account the need of the regulated entities to hedge or buy ahead allowances to mitigate their price and liquidity risk, a higher amount of allowances should be auctioned early on. In 2026, the auction volumes should therefore be 30 % higher than the total quantity of allowances for 2026. This amount would be sufficient to provide liquidity, both if emissions decrease in line with

²⁵ Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (OJ L 58 27.2.2020, p. 4).

²⁶ Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).

reduction needs, and in the event emission reductions only materialise progressively. The detailed rules for this front-loading of auction volume are to be established in a delegated act related to auctioning, adopted pursuant to Article 10(4) of Directive 2003/87/EC.

- (51) The distribution rules on auction shares are highly relevant for any auction revenues that would accrue to the Member States, especially in view of the need to strengthen the ability of the Member States to address the social impacts of a carbon price signal in the buildings and road transport sectors. Notwithstanding the fact that the two sectors have very different characteristics, it is appropriate to set a common distribution rule similar to the one applicable to stationary installations. The main part of allowances should be distributed among all Member States on the basis of the average distribution of the emissions in the sectors covered during the period from 2016 to 2018.
- (52) The introduction of the carbon price in road transport and buildings should be accompanied by effective social compensation, especially in view of the already existing levels of energy poverty. About 34 million Europeans reported an inability to keep their homes adequately warm in 2018, and 6,9 % of the Union population have said that they cannot afford to heat their home sufficiently in a 2019 EU-wide survey²⁷. To achieve an effective social and distributional compensation, Member States should be required to spend the auction revenues on the climate and energy-related purposes already specified for the existing emissions trading, but also for measures added specifically to address related concerns for the new sectors of road transport and buildings, including related policy measures under Directive 2012/27/EU of the European Parliament and of the Council²⁸. Auction revenues should be used to address social aspects of the emission trading for the new sectors with a specific emphasis in vulnerable households, micro-enterprises and transport users. In this spirit, a new Social Climate Fund will provide dedicated funding to Member States to support the European citizens most affected or at risk of energy or mobility poverty. This Fund will promote fairness and solidarity between and within Member States while mitigating the risk of energy and mobility poverty during the transition. It will build on and complement existing solidarity mechanisms. The resources of the new Fund will in principle correspond to 25 % of the expected revenues from new emission trading in the period 2026-2032, and will be implemented on the basis of the Social Climate Plans that Member States should put forward under Regulation (EU) 20.../nn of the European Parliament and the Council²⁹. In addition, each Member State should use their auction revenues *inter alia* to finance a part of the costs of their Social Climate Plans.
- (53) Reporting on the use of auctioning revenues should be aligned with the current reporting established by Regulation (EU) 2018/1999 of the European Parliament and of the Council³⁰.

²⁷ Data from 2018. Eurostat, SILC [ilc_mdes01].

²⁸ Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1–56).

²⁹ [Add ref to the Regulation establishing the Social Climate Fund].

³⁰ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC,

- (54) Innovation and development of new low-carbon technologies in the sectors of buildings and road transport are crucial for ensuring the cost-efficient contribution of these sectors to the expected emission reductions. Therefore, 150 million allowances from emissions trading in the buildings and road transport sectors should also be made available to the Innovation Fund to stimulate the cost-efficient emission reductions.
- (55) Regulated entities covered by the buildings and road transport emissions trading should surrender allowances for their verified emissions corresponding to the quantities of fuels they have released for consumption. They should surrender allowances for the first time for their verified emissions in 2026. In order to minimise the administrative burden, a number of rules applicable to the existing emissions trading system for stationary installations and aviation should be made applicable to emissions trading for buildings and road transport, with the necessary adaptations. This includes, in particular, rules on transfer, surrender and cancellation of allowances, as well as the rules on the validity of allowances, penalties, competent authorities and reporting obligations of Member States.
- (56) For emissions trading in the buildings and road transport sectors to be effective, it should be possible to monitor emissions with high certainty and at reasonable cost. Emissions should be attributed to regulated entities on the basis of fuel quantities released for consumption and combined with an emission factor. Regulated entities should be able to reliably and accurately identify and differentiate the sectors in which the fuels are released for consumption, as well as the final users of the fuels, in order to avoid undesirable effects, such as double burden. To have sufficient data to establish the total number of allowances for the period from 2028 to 2030, the regulated entities holding a permit at the start of the system in 2025 should report their associated historical emissions for 2024.
- (57) It is appropriate to introduce measures to address the potential risk of excessive price increases, which, if particularly high at the start of the buildings and road transport emissions trading, may undermine the readiness of households and individuals to invest in reducing their greenhouse gas emissions. These measures should complement the safeguards provided by the Market Stability Reserve established by Decision (EU) 2015/1814 of the European Parliament and of the Council³¹ and that became operational in 2019. While the market will continue to determine the carbon price, safeguard measures will be triggered by rules-based automatism, whereby allowances will be released from the Market Stability Reserve only if concrete triggering conditions based on the increase in the average allowance price are met. This additional mechanism should also be highly reactive, in order to address excessive volatility due to factors other than changed market fundamentals. The measures should be adapted to different levels of excessive price increase, which will result in different degrees of the intervention. The triggering conditions should be closely monitored by the Commission and the measures should be adopted by the Commission as a matter of urgency when the conditions are met. This is without prejudice to any

³¹ 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1–77).
Decision (EU) 2015/1814 of the European Parliament and of the Council of 6 October 2015 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading scheme and amending Directive 2003/87/EC (OJ L 264, 9.10.2015, p. 1).

accompanying measures that Member States may adopt to address adverse social impacts.

- (58) The application of emissions trading in the buildings and road transport sectors should be monitored by the Commission, including the degree of price convergence with the existing ETS, and, if necessary, a review should be proposed to the European Parliament and the Council to improve the effectiveness, administration and practical application of emissions trading for those sectors on the basis of acquired knowledge as well as increased price convergence. The Commission should be required to submit the first report on those matters by 1 January 2028.
- (59) In order to ensure uniform conditions for the implementation of Articles 3gd(3), 12(3b) and 14(1) of Directive 2003/87/EC, implementing powers should be conferred on the Commission. To ensure synergies with the existing regulatory framework, the conferral of implementing powers in Articles 14 and 15 of that Directive should be extended to cover the sectors of road transport and buildings. Those implementing powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council³².
- (60) In order to adopt non-legislative acts of general application to supplement or amend certain non-essential elements of a legislative act, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of Articles 10(4) and 10a(8) of that Directive. Moreover, to ensure synergies with the existing regulatory framework, the delegation in Articles 10(4) and 10a(8) of Directive 2003/87/EC should be extended to cover the sectors of road transport and buildings. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts. In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents³³, Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified
- (61) A well-functioning, reformed EU ETS comprising an instrument to stabilise the market is a key means for the Union to reach its agreed target for 2030 and the commitments under the Paris Agreement. The Market Stability Reserve seeks to address the imbalance between supply and demand of allowances in the market. Article 3 of Decision (EU) 2015/1814 provides that the reserve is to be reviewed three years after it becomes operational, paying particular attention to the percentage figure

³² Regulation (EU) No 182/2011 of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by the Member States of the Commission's exercise of implementing powers (OJ L 55, 28.02.2011, p. 13).

³³ OJ C 369, 17.12.2011, p. 14.

for the determination of the number of allowances to be placed in the Market Stability Reserve, the threshold for the total number of allowances in circulation (TNAC) that determines the intake of allowances, and the number of allowances to be released from the reserve.

- (62) Considering the need to deliver a stronger investment signal to reduce emissions in a cost-efficient manner and with a view to strengthening the EU ETS, Decision (EU) 2015/1814 should be amended so as to increase the percentage rate for determining the number of allowances to be placed each year in the Market Stability Reserve. In addition, for lower levels of the TNAC, the intake should be equal to the difference between the TNAC and the threshold that determines the intake of allowances. This would prevent the considerable uncertainty in the auction volumes that results when the TNAC is close to the threshold, and at the same time ensure that the surplus reaches the volume bandwidth within which the carbon market is deemed to operate in a balanced manner.
- (63) Furthermore, in order to ensure that the level of allowances that remains in the Market Stability Reserve after the invalidation is predictable, the invalidation of allowances in the reserve should no longer depend on the auction volumes of the previous year. The number of allowances in the reserve should, therefore, be fixed at a level of 400 million allowances, which corresponds to the lower threshold for the value of the TNAC.
- (64) The analysis of the impact assessment accompanying the proposal for this Directive has also shown that net demand from aviation should be included in the total number of allowances in circulation. In addition, since aviation allowances can be used in the same way as general allowances, including aviation in the reserve would make it a more accurate, and thus a better tool to ensure the stability of the market. The calculation of the total number of allowances in circulation should include aviation emissions and allowances issued in respect of aviation as of the year following the entry into force of this Directive.
- (65) To clarify the calculation of the total number of allowances in circulation (TNAC), Decision (EU) 2015/1814 should specify that only allowances issued and not put in the Market Stability Reserve are included in the supply of allowances. Moreover, the formula should no longer subtract the number of allowances in the Market Stability Reserve from the supply of allowances. This change would have no material impact on the result of the calculation of the TNAC, including on the past calculations of the TNAC or on the reserve.
- (66) In order to mitigate the risk of supply and demand imbalances associated with the start of emissions trading for the buildings and road transport sectors, as well as to render it more resistant to market shocks, the rule-based mechanism of the Market Stability Reserve should be applied to those new sectors. For that reserve to be operational from the start of the system, it should be established with an initial endowment of 600 million allowances for emissions trading in the road transport and buildings sectors. The initial lower and upper thresholds, which trigger the release or intake of allowances from the reserve, should be subject to a general review clause. Other elements such as the publication of the total number of allowances in circulation or the quantity of allowances released or placed in the reserve should follow the rules of the reserve for other sectors.
- (67) It is necessary to amend Regulation (EU) 2015/757 to take into account the inclusion of the maritime transport sector in the EU ETS. Regulation (EU) 2015/757 should be

amended to oblige companies to report aggregated emissions data at company level and to submit for approval their verified monitoring plans and aggregated emissions data at company level to the responsible administering authority. In addition, the Commission should be empowered to adopt delegated acts to amend the methods for monitoring CO₂ emissions and the rules on monitoring, as well as any other relevant information set out in Regulation (EU) 2015/757, to ensure the effective functioning of the EU ETS at administrative level and to supplement Regulation (EU) 2015/757 with the rules for the approval of monitoring plans and changes thereof by administering authorities, with the rules for the monitoring, reporting and submission of the aggregated emissions data at company level and with the rules for the verification of the aggregated emissions data at company level and for the issuance of a verification report in respect of the aggregated emissions data at company level. The data monitored, reported and verified under Regulation (EU) 2015/757 might also be used for the purpose of compliance with other Union law requiring the monitoring, reporting and verification of the same ship information.

- (68) Directive 2003/87/EC, Decision (EU) 2015/1814 and Regulation (EU) 2015/757 should therefore be amended accordingly,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Amendments to Directive 2003/87/EC

Directive 2003/87/EC is amended as follows:

- (1) In Article 2, paragraphs 1 and 2 are replaced by the following:

“1. This Directive shall apply to the activities listed in Annexes I and III, and to the of greenhouse gases listed in Annex II. Where an installation that is included in the scope of the EU ETS due to the operation of combustion units with a total rated thermal input exceeding 20 MW changes its production processes to reduce its greenhouse gas emissions and no longer meets that threshold, it shall remain in the scope of the EU ETS until the end of the relevant five year period referred to in Article 11(1), second subparagraph, following the change to its production process.

2. This Directive shall apply without prejudice to any requirements pursuant to Directive 2010/75/EU of the European Parliament and of the Council(*).

(*) Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) OJ L 334, 17.12.2010, p. 17.”;

- (2) Article 3 is amended as follows:

- (a) point (b) is replaced by the following:

“(b) ‘emissions’ means the release of greenhouse gases from sources in an installation or the release from an aircraft performing an aviation activity listed in Annex I or from ships performing a maritime transport activity listed in Annex I of the gases specified in respect of that activity, or the release of greenhouse gases corresponding to the activity referred to in Annex III;”;

- (b) point (d) is replaced by the following:

“(d) ‘greenhouse gas emissions permit’ means the permit issued in accordance with Articles 5, 6 and 30b;”;

(c) point (u) is deleted;

(d) the following points (v) to (z) are added:

“(v) ‘shipping company’ means the shipowner or any other organisation or person, such as the manager or the bareboat charterer, that has assumed the responsibility for the operation of the ship from the shipowner and that, on assuming such responsibility, has agreed to take over all the duties and responsibilities imposed by the International Management Code for the Safe Operation of Ships and for Pollution Prevention, set out in Annex I to Regulation (EC) No 336/2006 of the European Parliament and of the Council(*);

(*) Regulation (EC) No 336/2006 of the European Parliament and of the Council of 15 February 2006 on the implementation of the International Safety Management Code within the Community and repealing Council Regulation (EC) No 3051/95 (OJ L 64, 4.3.2006, p. 1).

(w) ‘administering authority in respect of a shipping company’ means the authority responsible for administering the EU ETS in respect of a shipping company in accordance with Article 3gd;”;

(x) ‘regulated entity’ for the purposes of Chapter IVa shall mean any natural or legal person, except for any final consumer of the fuels, that engages in the activity referred to in Annex III and that falls within one of the following categories:

- (i) where the fuel passes through a tax warehouse as defined in Article 3(11) of Council Directive (EU) 2020/262(*), the authorised warehouse keeper as defined in Article 3(1) of that Directive, liable to pay the excise duty which has become chargeable pursuant to Article 7 of that Directive;
- (ii) if point (i) is not applicable, any other person liable to pay the excise duty which has become chargeable pursuant to Article 7 of Directive (EU) 2020/262 in respect of the fuels covered by this Chapter;
- (iii) if points (i) and (ii) are not applicable, any other person which has to be registered by the relevant competent authorities of the Member State for the purpose of being liable to pay the excise duty, including any person exempt from paying the excise duty, as referred to in Article 21(5), fourth sub-paragraph, of Council Directive 2003/96/EC(**);
- (iv) if points (i), (ii) and (iii) are not applicable, or if several persons are jointly and severally liable for payment of the same excise duty, any other person designated by a Member State .

(*) Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (OJ L 058 27.2.2020, p. 4).

(**) Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products and electricity (OJ L 283 31.10.2003, p. 51).

(y) ‘fuel’ for the purposes of Chapter IVa shall mean any fuel listed in Table-A and Table-C of Annex I to Directive 2003/96/EC, as well as any other product offered for sale as motor fuel or heating fuel as specified in Article 2(3) of that Directive;

(z) ‘release for consumption’ for the purposes of Chapter IVa shall have the same meaning as in Article 6(3) of Directive (EU) 2020/262.”;

- (3) the title of Chapter II is replaced by the following:

“AVIATION AND MARITIME TRANSPORT”

- (4) Article 3a is replaced by the following:

“Article 3a

Scope

Articles 3b to 3f shall apply to the allocation and issue of allowances in respect of the aviation activities listed in Annex I. Articles 3g to 3ge shall apply in respect of the maritime transport activities listed in Annex I.”

- (5) **Articles 3f and 3g are replaced by the following:**

“Article 3f

Monitoring and reporting plans

The administering Member State shall ensure that each aircraft operator submits to the competent authority in that Member State a monitoring plan setting out measures to monitor and report emissions and tonne-kilometre data for the purpose of an application under Article 3e and that such plans are approved by the competent authority in accordance with the acts referred to in Article 14.

Article 3g

Scope of application to maritime transport activities

1. The allocation of allowances and the application of surrender requirements in respect of maritime transport activities shall apply in respect of fifty percent (50 %) of the emissions from ships performing voyages departing from a port under the jurisdiction of a Member State and arriving at a port outside the jurisdiction of a Member State, fifty percent (50 %) of the emissions from ships performing voyage departing from a port outside the jurisdiction of a Member State and arriving at a port under the jurisdiction of a Member State, one hundred percent (100 %) of emissions from ships performing voyages departing from a port under the jurisdiction of a Member State and arriving at a port under the jurisdiction of a Member State and one hundred percent (100 %) of emissions from ships at berth in a port under the jurisdiction of a Member State.
2. Articles 9, 9a and 10 shall apply to maritime transport activities in the same manner as they apply to other activities covered by the EU ETS.”

- (6) the **following** Articles 3ga to 3ge are added:

“Article 3ga

Phase-in of requirements for maritime transport

Shipping companies shall be liable to surrender allowances according to the following schedule:

- (a) 20 % of verified emissions reported for 2023;
- (b) 45 % of verified emissions reported for 2024;
- (c) 70 % of verified emissions reported for 2025;
- (d) 100 % of verified emissions reported for 2026 and each year thereafter.

To the extent that fewer allowances are surrendered compared to the verified emissions from maritime transport for the years 2023, 2024 and 2025, once the difference between verified emissions and allowances surrendered has been established in respect of each year, a corresponding quantity of allowances shall be cancelled rather than auctioned pursuant to Article 10.

Article 3gb

Monitoring and reporting of emissions from maritime transport

In respect of emissions from maritime transport activities listed in Annex I, the administering authority shall ensure that a shipping company under its responsibility monitors and reports the relevant parameters during a reporting period, and submits aggregated emissions data at company level to the administering authority in line with Chapter II of Regulation (EU) 2015/757 of the European Parliament and of the Council (*).

(*) Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC (OJ L 123, 19.5.2015, p. 55).

Article 3gc

Verification and accreditation of emissions from maritime transport

The administering authority in respect of a shipping company shall ensure that the reporting of aggregated emissions data at shipping company level submitted by a shipping company pursuant to Article 3gb is verified in accordance with the verification and accreditation rules set out in Chapter III of Regulation (EU) 2015/757 (*).

(*) Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC (OJ L 123, 19.5.2015, p. 55).

Article 3gd

Administering authority in respect of a shipping company

1. The administering authority in respect of a shipping company shall be:

- (a) in the case of a shipping company registered in a Member State, the Member State in which the shipping company is registered;
- (b) in the case of a shipping company that is not registered in a Member State, the Member State with the greatest estimated number of port calls from voyages performed by that shipping company in the last two monitoring years and falling within the scope set out in Article 3g;
- (c) in the case of a shipping company that is not registered in a Member State and that did not carry out any voyage falling within the scope set out in Article 3g in the preceding two monitoring years, the administering authority shall be the Member State from where the shipping company has started its first voyage falling within the scope set out in Article 3g.

Where appropriate, the responsible administering authority in respect of a shipping company shall be updated biennially.

2. Based on the best available information, the Commission shall:

- (a) before 1 February 2024, publish a list of shipping companies which performed a maritime activity listed in Annex I that fell within the scope defined in Article 3g on or with effect from 1 January 2023, specifying the administering authority for each shipping company in accordance with paragraph 1; and
- (b) at least every two years thereafter, update the list to reattribute shipping companies to another administering authority where appropriate or to include shipping companies which have subsequently performed a maritime activity listed in Annex I that fell within the scope defined in Article 3g.

3. The Commission shall adopt implementing acts to establish detailed rules relating to the administration of shipping companies by administering authorities under this Directive. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).

Article 3ge

Reporting and review

1. The Commission shall consider possible amendments in relation to the adoption by the International Maritime Organization of a global market-based measure to reduce greenhouse gas emissions from maritime transport. In the event of the adoption of such a measure, and in any event before the 2028 global stocktake and no later than 30 September 2028, the Commission shall present a report to the European Parliament and to the Council in which it shall examine any such measure. Where appropriate, the Commission may follow to the report with a legislative proposal to the European Parliament and to the Council to amend this Directive as appropriate.

2. The Commission shall monitor the implementation of this Chapter and possible trends as regards companies seeking to avoid being bound by the requirements of this Directive. If appropriate, the Commission shall propose measures to prevent such avoidance.”;

- (7) Article 3h is replaced by the following:

“Article 3h

Scope

The provisions of this Chapter shall apply to greenhouse gas emissions permits and the allocation and issue of allowances in respect of activities listed in Annex I other than aviation and maritime transport activities.”;

- (8) in Article 6(2), point (e) is replaced by the following:
- “(e) an obligation to surrender allowances equal to the total emissions of the installation in each calendar year, as verified in accordance with Article 15, within four months following the end of that year.”;
- (9) Article 8 is amended as follows:
- (a) the words “of the European Parliament and of the Council(1)” and footnote (1) are deleted;
- (b) the following paragraph is added:
- (c) “The Commission shall review the effectiveness of synergies with Directive 2010/75/EU. Environmental and climate relevant permits should be coordinated to ensure efficient and speedier execution of measures needed to comply with EU climate and energy objectives. The Commission may submit a report to the European Parliament and the Council in the context of any future review of this Directive.”;
- (10) in Article 9, the following paragraph is added:
- “In [the year following entry into force of this amendment], the Union-wide quantity of allowances shall be decreased by [-- million allowances (*to be determined depending on year of entry into force*)]. In the same year, the Union-wide quantity of allowances shall be increased by 79 million allowances for maritime transport. Starting in [the year following entry into force of this amendment], the linear factor shall be 4,2 %. The Commission shall publish the Union-wide quantity of allowances within 3 months of [date of entry into force of the amendment to be inserted].”;
- (11) Article 10 is amended as follows:
- (a) in paragraph 1, the third subparagraph is replaced by the following:
- “2 % of the total quantity of allowances between 2021 and 2030 shall be auctioned to establish a fund to improve energy efficiency and modernise the energy systems of certain Member States (‘the beneficiary Member States’) as set out in Article 10d (‘the Modernisation Fund’). The beneficiary Member States for this amount of allowances shall be the Member States with a GDP per capita at market prices below 60 % of the Union average in 2013. The funds corresponding to this quantity of allowances shall be distributed in accordance with Part A of Annex IIb.
- In addition, 2,5 % of the total quantity of allowances between [year following the entry into force of the Directive] and 2030 shall be auctioned for the Modernisation Fund. The beneficiary Member States for this amount of allowances shall be the Member States with a GDP per capita at market prices below 65 % of the Union average during the period 2016 to 2018. The funds corresponding to this quantity of allowances shall be distributed in accordance with Part B of Annex IIb.”
- (b) in paragraph 3, the first and second sentence are replaced by the following:

“3. Member States shall determine the use of revenues generated from the auctioning of allowances, except for the revenues established as own resources in accordance with Article 311(3) TFEU and entered in the Union budget. Member States shall use their revenues generated from the auctioning of allowances referred to in paragraph 2, with the exception of the revenues used for the compensation of indirect carbon costs referred to in Article 10a(6), for one or more of the following:”;

- (c) in paragraph 3, point (h) is replaced by the following:

“(h) measures intended to improve energy efficiency, district heating systems and insulation, or to provide financial support in order to address social aspects in lower- and middle-income households, including by reducing distortive taxes;”;

- (d) in paragraph 4, the first sentence is replaced by the following:

“4. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning the timing, administration and other aspects of auctioning, including the modalities for the transfer of a share of revenues to the Union budget, in order to ensure that it is conducted in an open, transparent, harmonised and non-discriminatory manner.”

- (12) Article 10a is amended as follows:

- (a) paragraph 1 is amended as follows:

- (i) the following two subparagraphs are inserted after the second subparagraph:

“In the case of installations covered by the obligation to conduct an energy audit under Article 8(4) of Directive 2012/27/EU of the European Parliament and of the Council(*) [Article reference to be updated with the revised Directive], free allocation shall only be granted fully if the recommendations of the audit report are implemented, to the extent that the pay-back time for the relevant investments does not exceed five years and that the costs of those investments are proportionate. Otherwise, the amount of free allocation shall be reduced by 25 %. The amount of free allocation shall not be reduced if an operator demonstrates that it has implemented other measures which lead to greenhouse gas emission reductions equivalent to those recommended by the audit report. The measures referred to in the first subparagraph shall be adjusted accordingly.

No free allocation shall be given to installations in sectors or subsectors to the extent they are covered by other measures to address the risk of carbon leakage as established by Regulation (EU) [reference to CBAM](**). The measures referred to in the first subparagraph shall be adjusted accordingly

(*) Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).”;

(**) [*CBAM full reference*]

- (ii) the following sentence is added at the end of the third subparagraph:

“In order to provide further incentives for reducing greenhouse gas emissions and improving energy efficiency, the determined Union-wide ex-ante benchmarks shall be reviewed before the period from 2026 to 2030 in view of potentially modifying the definitions and system boundaries of existing product benchmarks.”;

- (b) the following paragraph 1a is inserted:

“1a. No free allocation shall be given in relation to the production of products listed in Annex I of Regulation [CBAM] as from the date of application of the Carbon Border Adjustment Mechanism.

By way of derogation from the previous subparagraph, for the first years of operation of Regulation [CBAM], the production of these products shall benefit from free allocation in reduced amounts. A factor reducing the free allocation for the production of these products shall be applied (CBAM factor). The CBAM factor shall be equal to 100 % for the period during the entry into force of [CBAM regulation] and the end of 2025, 90 % in 2026 and shall be reduced by 10 percentage points each year to reach 0 % by the tenth year.

The reduction of free allocation shall be calculated annually as the average share of the demand for free allocation for the production of products listed in Annex I of Regulation [CBAM] compared to the calculated total free allocation demand for all installations, for the relevant period referred to in Article 11, paragraph 1. The CBAM factor shall be applied.

Allowances resulting from the reduction of free allocation shall be made available to support innovation in accordance with Article 10a(8).”;

- (c) paragraph 2 is amended as follows:

- (i) in the third subparagraph, point (c) is replaced by the following:

“(c) For the period from 2026 to 2030, the benchmark values shall be determined in the same manner as set out in points (a) and (d) on the basis of information submitted pursuant to Article 11 for the years 2021 and 2022 and on the basis of applying the annual reduction rate in respect of each year between 2008 and 2028.”;

- (iii) in the third subparagraph, the following point (d) is added:

“(d) Where the annual reduction rate exceeds 2,5 % or is below 0,2 %, the benchmark values for the period from 2026 to 2030 shall be the benchmark values applicable in the period from 2013 to 2020 reduced by whichever of those two percentage rates is relevant, in respect of each year between 2008 and 2028.”;

- (iv) the fourth subparagraph is replaced by the following:

“By way of derogation regarding the benchmark values for aromatics and syngas, those benchmark values shall be adjusted by the same percentage as the refineries benchmarks in order to preserve a level playing field for producers of those products.”;

- (d) paragraphs 3 and 4 are deleted;

- (e) in paragraph 6, the first subparagraph is replaced by the following:
- “Member States should adopt financial measures in accordance with the second and fourth subparagraphs in favour of sectors or subsectors which are exposed to a genuine risk of carbon leakage due to significant indirect costs that are actually incurred from greenhouse gas emission costs passed on in electricity prices, provided that such financial measures are in accordance with State aid rules, and in particular do not cause undue distortions of competition in the internal market. The financial measures adopted should not compensate indirect costs covered by free allocation in accordance with the benchmarks established pursuant to paragraph 1. Where a Member State spends an amount higher than the equivalent of 25 % of their auction revenues of the year in which the indirect costs were incurred, it shall set out the reasons for exceeding that amount.”;
- (f) in paragraph 7, the second subparagraph is replaced by the following:
- “From 2021, allowances that pursuant to paragraphs 19, 20 and 22 are not allocated to installations shall be added to the amount of allowances set aside in accordance with the first sentence of the first subparagraph of this paragraph.”;
- (g) paragraph 8 is replaced by the following:
- “8. 365 million allowances from the quantity which could otherwise be allocated for free pursuant to this Article, and 85 million allowances from the quantity which could otherwise be auctioned pursuant to Article 10, as well as the allowances resulting from the reduction of free allocation referred to in Article 10a(1a), shall be made available to a Fund with the objective of supporting innovation in low-carbon technologies and processes, and contribute to zero pollution objectives (the ‘Innovation Fund’). Allowances that are not issued to aircraft operators due to the closure of aircraft operators and which are not necessary to cover any shortfall in surrenders by those operators, shall also be used for innovation support as referred to in the first subparagraph.

In addition, 50 million unallocated allowances from the market stability reserve shall supplement any remaining revenues from the 300 million allowances available in the period from 2013 to 2020 under Commission Decision 2010/670/EU(*), and shall be used in a timely manner for innovation support as referred to in the first subparagraph. Furthermore, the external assigned revenues referred to in Article 21(2) of Regulation (EU) [FuelEU Maritime] shall be allocated to the Innovation Fund and implemented in line with this paragraph.

The Innovation Fund shall cover the sectors listed in Annex I and Annex III, including environmentally safe carbon capture and utilisation (“CCU”) that contributes substantially to mitigating climate change, as well as products substituting carbon intensive ones produced in sectors listed in Annex I, and to help stimulate the construction and operation of projects aimed at the environmentally safe capture and geological storage (“CCS”) of CO₂, as well as of innovative renewable energy and energy storage technologies; in geographically balanced locations. The Innovation Fund may also support break-through innovative technologies and infrastructure to decarbonise the

maritime sector and for the production of low- and zero-carbon fuels in aviation, rail and road transport. Special attention shall be given to projects in sectors covered by the [CBAM regulation] to support innovation in low carbon technologies, CCU, CCS, renewable energy and energy storage, in a way that contributes to mitigating climate change.

Projects in the territory of all Member States, including small-scale projects, shall be eligible. Technologies receiving support shall be innovative and not yet commercially viable at a similar scale without support but shall represent breakthrough solutions or be sufficiently mature for application at pre-commercial scale.

The Commission shall ensure that the allowances destined for the Innovation Fund are auctioned in accordance with the principles and modalities laid down in Article 10(4). Proceeds from the auctioning shall constitute external assigned revenue in accordance with Article 21(5) of the Financial Regulation. Budgetary commitments for actions extending over more than one financial year may be broken down over several years into annual instalments.

Projects shall be selected on the basis of objective and transparent criteria, taking into account, where relevant, the extent to which projects contribute to achieving emission reductions well below the benchmarks referred to in paragraph 2. Projects shall have the potential for widespread application or to significantly lower the costs of transitioning towards a low-carbon economy in the sectors concerned. Projects involving CCU shall deliver a net reduction in emissions and ensure avoidance or permanent storage of CO₂. In the case of grants provided through calls for proposals, up to 60 % of the relevant costs of projects may be supported, out of which up to 40 % need not be dependent on verified avoidance of greenhouse gas emissions, provided that pre-determined milestones, taking into account the technology deployed, are attained. In the case of support provided through competitive bidding and in the case of technical assistance support, up to 100 % of the relevant costs of projects may be supported.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Directive concerning rules on the operation of the Innovation Fund, including the selection procedure and criteria, and the eligible sectors and technological requirements for the different types of support.

No project shall receive support via the mechanism under this paragraph that exceeds 15 % of the total number of allowances available for this purpose. These allowances shall be taken into account under paragraph 7.”;

(*) Commission Decision 2010/670/EU of 3 November 2010 laying down criteria and measures for the financing of commercial demonstration projects that aim at the environmentally safe capture and geological storage of CO₂ as well as demonstration projects of innovative renewable energy technologies under the system for greenhouse gas emission allowance trading within the Union established by Directive 2003/87/EC of the European Parliament and of the Council (OJ L 290, 6.11.2010, p. 39).

- (h) in paragraph 19, the first sentence is replaced by the following:

“19. No free allocation shall be given to an installation that has ceased operating.”;

- (i) the following paragraph 22 is added:

“22. Where corrections to free allocations granted pursuant to Article 11(2) are necessary, these shall be carried out with allowances from, or by adding allowances to, the amount of allowances set aside in accordance with paragraph 7 of this Article.”;

- (13) in Article 10c, paragraph 7 is replaced by the following:

“Member States shall require benefiting electricity generating installations and network operators to report, by 28 February of each year, on the implementation of their selected investments, including the balance of free allocation and investment expenditure incurred and the types of investments supported. Member States shall report on this to the Commission, and the Commission shall make such reports public.”;

- (14) Article 10d is amended as follows:

- (a) in paragraph 1, the first and second subparagraphs are replaced by the following:

“1. A fund to support investments proposed by the beneficiary Member States, including the financing of small-scale investment projects, to modernise energy systems and improve energy efficiency shall be established for the period from 2021 to 2030 (the ‘Modernisation Fund’). The Modernisation Fund shall be financed through the auctioning of allowances as set out in Article 10, for the beneficiary Member States set out therein.

The investments supported shall be consistent with the aims of this Directive, as well as the objectives of the Communication from the Commission of 11 December 2019 on The European Green Deal (*) and Regulation (EU) 2021/1119 of the European Parliament and of the Council (**) and the long-term objectives as expressed in the Paris Agreement. No support from the Modernisation Fund shall be provided to energy generation facilities that use fossil fuels.”;

(*) COM(2019) 640 final.

(**) Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (‘European Climate Law’) (OJ L 243, 9.7.2021, p. 1).”;

- (b) paragraph 2 is replaced by the following:

“2. At least 80 % of the financial resources from the Modernisation Fund shall be used to support investments in the following:

- (a) the generation and use of electricity from renewable sources;
- (b) heating and cooling from renewable sources;
- (c) the improvement of demand side energy efficiency, including in transport, buildings, agriculture and waste;

- (d) energy storage and the modernisation of energy networks, including district heating pipelines, grids for electricity transmission and the increase of interconnections between Member States;
- (e) the support of low-income households, including in rural and remote areas, to address energy poverty and to modernise their heating systems; and
- (f) a just transition in carbon-dependent regions in the beneficiary Member States, so as to support the redeployment, re-skilling and up-skilling of workers, education, job-seeking initiatives and start-ups, in dialogue with the social partners.”;

(15) Article 12 is amended as follows:

(a) paragraph 2 is replaced by the following:

“2. Member States shall ensure that allowances issued by a competent authority of another Member State are recognised for the purpose of meeting an operator’s, an aircraft operator’s or a shipping company’s obligations under paragraph 3”;

(b) paragraph 2a is deleted;

(c) paragraph 3 is replaced by the following:

“3. The Member States, administering Member States and administering authorities in respect of a shipping company shall ensure that, by 30 April each year:

(a) the operator of each installation surrenders a number of allowances that is equal to the total emissions from that installation during the preceding calendar year as verified in accordance with Article 15;

(b) each aircraft operator surrenders a number of allowances that is equal to its total emissions during the preceding calendar year, as verified in accordance with Article 15;

(c) each shipping company surrenders a number of allowances equal to its total emissions during the preceding calendar year, as verified in accordance with Article 3gc.

Member States, administering Member States and administering authorities in respect of a shipping company shall ensure that allowances surrendered in accordance with the first subparagraph are subsequently cancelled.”;

(d) in paragraph 3-a, the first sentence is replaced by the following:

“3-a. Where necessary, and for as long as is necessary, in order to protect the environmental integrity of the EU ETS, operators, aircraft operators, and shipping companies in the EU ETS shall be prohibited from using allowances that are issued by a Member State in respect of which there are obligations lapsing for aircraft operators, shipping companies and other operators.”;

(e) the following paragraph 3b is inserted:

“3b. An obligation to surrender allowances shall not arise in respect of emissions of greenhouse gases which are considered to have been captured and

utilised to become permanently chemically bound in a product so that they do not enter the atmosphere under normal use.

The Commission shall adopt implementing acts concerning the requirements to consider that greenhouse gases have become permanently chemically bound in a product so that they do not enter the atmosphere under normal use.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 22a(2).”;

- (16) in Article 14(1), first subparagraph, the following sentence is added:

“Those implementing acts shall apply the sustainability and greenhouse gas emission saving criteria for the use of biomass established by Directive (EU) 2018/2001 of the European Parliament and of the Council(*), with any necessary adjustments for application under this Directive, for this biomass to be zero-rated. They shall specify how to account for storage of emissions from a mix of zero-rated sources and sources that are not zero-rated. They shall also specify how to account for emissions from renewable fuels of non-biological origin and recycled carbon fuels, ensuring that these emissions are accounted for and that double counting is avoided.”;

(*) Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82).”;

- (17) The title of Chapter IV is replaced by the following:

**“PROVISIONS APPLYING TO AVIATION, MARITIME TRANSPORT, AND
STATIONARY INSTALLATIONS”.**

- (18) Article 16 is amended as follows:

- (a) paragraph 2 is replaced by the following:

“2. Member States shall ensure the publication of the names of operators, aircraft operators and shipping companies who are in breach of requirements to surrender sufficient allowances under this Directive.”;

- (b) the following paragraph 3a is inserted:

“3a. The penalties set out in paragraph 3 shall also apply in respect of shipping companies.”;

- (c) the following paragraph 11a is inserted:

“11a. In the case of a shipping company that has failed to comply with the surrender requirements for two or more consecutive reporting periods and where other enforcement measures have failed to ensure compliance, the competent authority of the Member State of the port of entry may, after giving the opportunity to the shipping company concerned to submit its observations, issue an expulsion order which shall be notified to the Commission, the European Maritime Safety Agency (EMSA), the other Member States and the flag State concerned. As a result of the issuing of such an expulsion order, every Member State, with the exception of the Member State whose flag the ship is flying, shall refuse entry of the ships under the responsibility of the shipping company concerned into any of its ports until the company fulfils its surrender obligations in accordance with Article 12. Where the ship flies the

flag of a Member State, the Member State concerned shall, after giving the opportunity to the company concerned to submit its observations, order the ship to be detained until the shipping company fulfils its obligations. This paragraph shall be without prejudice to international maritime rules applicable in the case of ships in distress.”;

- (19) Article 18b is replaced by the following:

“Article 18b

Assistance from the European Maritime Safety Agency and other relevant organisations

For the purposes of carrying out its obligations under Articles 3c(4), 3f, 3gb, 3gc, 3gd, 3ge and 18a, the Commission and administering authorities may request the assistance of the European Maritime Safety Agency or another relevant organisation and may conclude to that effect any appropriate agreements with those organisations.”;

- (20) In Article 30, paragraph 2, the following sentence is added:

“The measures applicable to CBAM sectors shall be kept under review in light of the application of Regulation xxx [reference to CBAM].”;

- (21) The following Chapter IVa is inserted after Article 30:

“CHAPTER IVa

EMISSIONS TRADING SYSTEM FOR BUILDINGS AND ROAD TRANSPORT

Article 30a

Scope

The provisions of this Chapter shall apply to emissions, greenhouse gas emission permits, issue and surrender of allowances, monitoring, reporting and verification in respect of the activity referred to in Annex III. This Chapter shall not apply to any emissions covered by Chapters II, IIa and III.

Article 30b

Greenhouse emissions permits

1. Member States shall ensure that, from 1 January 2025, no regulated entity carries out the activity referred to in Annex III unless that regulated entity holds a permit issued by a competent authority in accordance with paragraphs 2 and 3.
2. An application to the competent authority by the regulated entity pursuant to paragraph 1 for a greenhouse gas emissions permit under this Chapter shall include, at least, a description of:
 - (a) the regulated entity;
 - (b) the type of fuels it releases for consumption and which are used for combustion in the buildings and road transport sectors as defined in Annex III and the means through which it releases those fuels for consumption;

- (c) the end use(s) of the fuels released for consumption for the activity referred to in Annex III;
 - (d) the measures planned to monitor and report emissions, in accordance with the acts referred to in Articles 14 and 30f;
 - (e) a non-technical summary of the information under points (a) to (d).
3. The competent authority shall issue a greenhouse gas emissions permit granting authorisation to the regulated entity referred to in paragraph 1 for the activity referred to in Annex III, if it is satisfied that the entity is capable of monitoring and reporting emissions corresponding to the quantities of fuels released for consumption pursuant to Annex III.
 4. Greenhouse gas emissions permits shall contain, at least, the following:
 - (f) the name and address of the regulated entity;
 - (g) a description of the means by which the regulated entity releases the fuels for consumption in the sectors covered by this Chapter;
 - (h) a list of the fuels the regulated entity releases for consumption in the sectors covered by this Chapter;
 - (i) a monitoring plan that fulfils the requirements established by the acts referred to in Article 14.;
 - (j) reporting requirements established by the acts referred to in Article 14;
 - (k) an obligation to surrender allowances, issued under this Chapter, equal to the total emissions in each calendar year, as verified in accordance with Article 15, within four months following the end of that year.
 5. Member States may allow the regulated entities to update monitoring plans without changing the permit. Regulated entities shall submit any updated monitoring plans to the competent authority for approval.
 6. The regulated entity shall inform the competent authority of any planned changes to the nature of its activity or to the fuels it releases for consumption, which may require updating the greenhouse gas emissions permit. Where appropriate, the competent authority shall update the permit in accordance with the acts referred to in Article 14. Where there is a change in the identity of the regulated entity covered by this Chapter, the competent authority shall update the permit to include the name and address of the new regulated entity.

Article 30c

Total quantity of allowances

1. The Union-wide quantity of allowances issued under this Chapter each year from 2026 shall decrease in a linear manner beginning in 2024. The 2024 value shall be defined as the 2024 emissions limits, calculated on the basis of the reference emissions under Article 4(2) of Regulation (EU) 2018/842 of the European Parliament and of the Council(*) for the sectors covered by this Chapter and applying the linear reduction trajectory for all emissions within the scope of that Regulation. The quantity shall decrease each year after 2024 by a linear reduction

factor of 5,15 %. By 1 January 2024, the Commission shall publish the Union-wide quantity of allowances for the year 2026.

2. The Union-wide quantity of allowances issued under this Chapter each year from 2028 shall decrease in a linear manner beginning from 2025 on the basis of the average emissions reported under this Chapter for the years 2024 to 2026. The quantity of allowances shall decrease by a linear reduction factor of 5,43 %, except if the conditions of point 1 of Annex IIIa apply, in which case, the quantity shall decrease with a linear reduction factor adjusted in accordance with the rules set out in point 2 of Annex IIIa. By 30 June 2027, the Commission shall publish the Union-wide quantity of allowances for the year 2028 and, if required, the adjusted linear reduction factor.

(*) Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013 (OJ L 156, 19.6.2018, p. 26).

Article 30d

Auctioning of allowances for the activity referred to in Annex III

1. From 2026, allowances covered by this Chapter shall be auctioned, unless they are placed in the Market Stability Reserve established by Decision (EU) 2015/1814. The allowances covered by this Chapter shall be auctioned separately from the allowances covered by Chapters II, IIa and III.
2. The auctioning of the allowances under this Chapter shall start in 2026 with a volume corresponding to 130 % of the auction volumes for 2026 established on the basis of the Union-wide quantity of allowances for that year and the respective auction shares and volumes pursuant to paragraph 3, 5 and 6. The additional volumes to be auctioned shall only be used for surrendering allowances pursuant to Article 30e(2) and be deducted from the auction volumes for the period from 2028 to 2030. The conditions for these early auctions shall be set in accordance with paragraph 7 and Article 10(4).

In 2026, 600 million allowances covered by this Chapter are created as holdings in the Market Stability Reserve pursuant to Article 1a(3) of Decision (EU) 2015/1814.

3. 150 million allowances issued under this Chapter shall be auctioned and all revenues from these auctions made available for the Innovation Fund established under Article 10a(8). Article 10a(8) shall apply to the allowances referred to in this paragraph.
4. The total quantity of allowances covered by this Chapter after deducting the quantities set out in paragraph 3, shall be auctioned by the Member States and distributed amongst them in shares that are identical to the share of reference emissions under Article 4(2) of Regulation (EU) 2018/842 for the sectors covered by this Chapter for the average of the period from 2016 to 2018, of the Member State concerned.

5. Member States shall determine the use of revenues generated from the auctioning of allowances referred to in paragraph 4, except for the revenues established as own resources in accordance with Article 311(3) TFEU and entered in the Union budget. Member States shall use their revenues for one or more of the activities referred to in Article 10(3) or for one or more of the following:
- (a) measures intended to contribute to the decarbonisation of heating and cooling of buildings or to the reduction of the energy needs of buildings, including the integration of renewable energies and related measures according to Articles 7(11), 12 and 20 of Directive 2012/27/EU [references to be updated with the revised Directive], as well as measures to provide financial support for low-income households in worst-performing buildings;
 - (b) measures intended to accelerate the uptake of zero-emission vehicles or to provide financial support for the deployment of fully interoperable refuelling and recharging infrastructure for zero-emission vehicles or measures to encourage a shift to public forms of transport and improve multimodality, or to provide financial support in order to address social aspects concerning low and middle-income transport users.

Member States shall use a part of their auction revenues generated in accordance with this Article to address social aspects of the emission trading under this Chapter with a specific emphasis on vulnerable households, vulnerable micro-enterprises and vulnerable transport users as defined under Regulation (EU) 20.../nn [Social Climate Fund Regulation](*). Where a Member State submits to the Commission a [Social Climate Plan] pursuant to that Regulation, the Member State shall use those revenues *inter alia* to finance that plan.

Member States shall be deemed to have fulfilled the provisions of this paragraph if they have in place and implement fiscal or financial support policies or regulatory policies, which leverage financial support, established for the purposes set out in the first subparagraph and which have a value equivalent to the revenues generated from the auctioning of allowances referred to in this Chapter.

Member States shall inform the Commission as to the use of revenues and the actions taken pursuant to this paragraph by including this information in their reports submitted under Regulation (EU) 2018/1999 of the European Parliament and of the Council (**).

6. Articles 10(4) and 10(5) shall apply to the allowances issued under this Chapter.

(*) Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).

(**) [*insert reference*]

Article 30e

Transfer, surrender and cancellation of allowances

1. Article 12 shall apply to the emissions, regulated entities and allowances covered by this Chapter with the exception of Article 12, paragraphs (2a), (3), (3a), paragraph (4), third and fourth sentence, and paragraph (5). For this purpose:
 - (a) any reference to emissions shall be read as if it were a reference to the emissions covered by this Chapter;
 - (b) any reference to operators of installations shall be read as if it were a reference to the regulated entities covered by this Chapter;
 - (c) any reference to allowances shall be read as if it were a reference to the allowances covered by this Chapter.
2. From 1 January 2027, Member States shall ensure that, by 30 April each year, the regulated entity surrenders a number of allowances covered by this Chapter, that is equal to the total emissions, corresponding to the quantity of fuels released for consumption pursuant to Annex III, during the preceding calendar year as verified in accordance with Articles 15 and 30f, and that those allowances are subsequently cancelled.

Article 30f

Monitoring, reporting, verification of emissions and accreditation

1. Articles 14 and 15 shall apply to the emissions, regulated entities and allowances covered by this Chapter. For this purpose:
 - (a) any reference to emissions shall be read as if it were a reference to the emissions covered by this Chapter;
 - (b) any reference to activity listed in Annex I shall be read as if it were a reference to the activity referred to in Annex III;
 - (c) any reference to operators shall be read as if it were a reference to the regulated entities covered by this Chapter;
 - (d) any reference to allowances shall be read as if it were a reference to the allowances covered by this Chapter.
2. Member States shall ensure that each regulated entity monitors for each calendar year as from 2025 the emissions corresponding to the quantities of fuels released for consumption pursuant to Annex III. They shall also ensure that each regulated entity reports these emissions to the competent authority in the following year, starting in 2026, in accordance with the acts referred to in Article 14(1).
3. Member States shall ensure that each regulated entity holding a permit in accordance with Article 30b on 1 January 2025 report their historical emissions for year 2024 by 30 March 2025.

4. Member States shall ensure that the regulated entities are able to identify and document reliably and accurately per type of fuel, the precise volumes of fuel released for consumption which are used for combustion in the buildings and road transport sectors as identified in Annex III, and the final use of the fuels released for consumption by the regulated entities. The Member States shall take appropriate measures to avoid any risk of double counting of emissions covered under this Chapter and the emissions under Chapters II, IIa and III. Detailed rules for avoiding double counting shall be adopted in accordance with Article 14(1).
5. The principles for monitoring and reporting of emissions covered by this Chapter are set out in Part C of Annex IV.
6. The criteria for the verification of emissions covered by this Chapter are set out in Part C of Annex V.

Article 30g

Administration

Articles 13, 15a, Article 16(1), (2), (3), (4) and (12), Articles 17, 18, 19, 20, 21, 22, 22a, 23 and 29 shall apply to the emissions, regulated entities and allowances covered by this Chapter. For this purpose:

- (a) any reference to emissions shall be read as if it were a reference to emissions covered by this Chapter;
- (b) any reference to operator shall be read as if it were a reference to regulated entities covered by this Chapter;
- (c) any reference to allowances shall be read as if it were a reference to the allowances covered by this Chapter.

Article 30h

Measures in the event of excessive price increase

1. Where, for more than three consecutive months, the average price of allowance in the auctions carried out in accordance with the act adopted under Article 10(4) is more than twice the average price of allowance during the six preceding consecutive months in the auctions for the allowances covered by this Chapter, the Commission shall, as a matter of urgency, adopt a decision to release 50 million allowances covered by this Chapter from the Market Stability Reserve in accordance with Article 1a(7) of Decision (EU) 2015/1814.
2. Where, for more than three consecutive months, the average price of allowance in the auctions carried out in accordance with the act adopted under Article 10(4) is more than three times the average price of allowance during the six preceding consecutive months in the auctions for the allowances covered by this Chapter, the Commission shall, as a matter of urgency, adopt a decision to release 150 million allowances covered by this Chapter from the Market

Stability Reserve in accordance with Article 1a(7) of Decision (EU) 2015/1814.

Article 30i

Review of this Chapter

By 1 January 2028, the Commission shall report to the European Parliament and to the Council on the implementation of the provisions of this Chapter with regard to their effectiveness, administration and practical application, including on the application of the rules under Decision (EU) 2015/1814 and use of allowances of this Chapter to meet compliance obligations of the compliance entities covered by Chapters II, IIa and III. Where appropriate, the Commission shall accompany this report with a proposal to the European Parliament and to the Council to amend this Chapter. By 31 October 2031 the Commission should assess the feasibility of integrating the sectors covered by Annex III in the Emissions Trading System covering the sectors listed in annex 1 of Directive 2003/87/EC.”;

- (22) Annexes I, IIb, IV and V to Directive 2003/87/EC are amended in accordance with Annex I to this Directive, and Annexes III, IIIa and IIIb are inserted in Directive 2003/87/EC as set out in Annex I to this Directive.

Article 2

Amendments to Decision (EU) 2015/1814

Decision (EU) 2015/1814 is amended as follows:

- (1) Article 1 is amended as follows:

- (a) in paragraph 4, the second sentence is replaced by the following:

“The total number of allowances in circulation in a given year shall be the cumulative number of allowances issued and not put in reserve in the period since 1 January 2008, including the number that were issued pursuant to Article 13(2) of Directive 2003/87/EC as in force until 18 March 2018 in that period and entitlements to use international credits exercised by installations under the EU ETS in respect of emissions up to 31 December of that given year, minus the cumulative tonnes of verified emissions from installations under the EU ETS between 1 January 2008 and 31 December of that same given year, any allowances cancelled in accordance with Article 12(4) of Directive 2003/87/EC.”;

- (b) the following paragraph 4a is inserted:

“4a. As from [the year following the entry into force of this Directive], the calculation of the total number of allowances in circulation shall include the number of allowances issued in respect of aviation and maritime transport since the beginning of that year, and the number of allowances surrendered by aircraft operators and ship operators in respect of emissions for which allowances are the units which can be used in respect of EU ETS obligations.

The allowances cancelled pursuant to Article 3ga of Directive 2003/87/EC shall be considered as issued for the purposes of the calculation of the total number of allowances in circulation.”;

- (c) paragraph 5 and 5a are replaced by the following:

“5. In any given year, if the total number of allowances in circulation is between 833 million and 1 096 million, a number of allowances equal to the difference between the total number of allowances in circulation, as set out in the most recent publication as referred to in paragraph 4 of this Article, and 833 million, shall be deducted from the volume of allowances to be auctioned by the Member States under Article 10(2) of Directive 2003/87/EC and shall be placed in the reserve over a period of 12 months beginning on 1 September of that year. If the total number of allowances in circulation is above 1 096 million allowances, the number of allowances to be deducted from the volume of allowances to be auctioned by the Member States under Article 10(2) of Directive 2003/87/EC and to be placed in the reserve over a period of 12 months beginning on 1 September of that year shall be equal to 12 % of the total number of allowances in circulation. By way of derogation from the last sentence, until 31 December 2030, the percentage shall be doubled.

Without prejudice to the total amount of allowances to be deducted pursuant to this paragraph, until 31 December 2030, allowances referred to in Article 10(2), first subparagraph, point (b), of Directive 2003/87/EC shall not be taken into account when determining Member States' shares contributing to that total amount.

5a. Unless otherwise decided in the first review carried out in accordance with Article 3, from 2023 allowances held in the reserve above 400 million allowances shall no longer be valid.”;

- (2) the following Article 1a is inserted:

“Article 1a

Operation of the Market Stability Reserve for the buildings and road transport sectors

1. Allowances covered by Chapter IVa of Directive 2003/87/EC shall be placed in and released from a separate section of the reserve established pursuant to Article 1 of this Decision, in accordance with the rules set out in this Article.
2. The placing in the reserve under this Article shall operate from 1 September 2027. The allowances covered by Chapter IVa of Directive 2003/87/EC shall be placed in, held in, and released from the reserve separately from the allowances covered by Article 1 of this Decision.
3. In 2026, the section referred to in paragraph 1 shall be created in accordance with Article 30d(2), second subparagraph, of Directive 2003/87/EC. By 1 January 2031, the allowances referred to in this paragraph that are not released from the reserve shall no longer be valid.
4. The Commission shall publish the total number of allowances in circulation covered by Chapter IVa of Directive 2003/87/EC each year, by 15 May of the subsequent year separately from the number of allowances in circulation under Article 1(4). The total number of allowances in circulation under this Article in a given year shall be the cumulative number of allowances covered by Chapter

IVa of Directive 2003/87/EC issued in the period since 1 January 2026, minus the cumulative tonnes of verified emissions covered by Chapter IVa of Directive 2003/87/EC for the period between 1 January 2026 and 31 December of that same given year and any allowances covered by Chapter IVa Directive 2003/87/EC cancelled in accordance with Article 12(4) of Directive 2003/87/EC. The first publication shall take place by 15 May 2027.

5. In any given year, if the total number of allowances in circulation, as set out in the most recent publication as referred to in paragraph 4 of this Article, is above 440 million allowances, 100 million allowances shall be deducted from the volume of allowances covered by Chapter IVa to be auctioned by the Member States under Article 30d of Directive 2003/87/EC and shall be placed in the reserve over a period of 12 months beginning on 1 September of that year.
6. In any given year, if the total number of allowances in circulation is fewer than 210 million, 100 million allowances covered by Chapter IVa shall be released from the reserve and added to the volume of allowances covered by Chapter IVa to be auctioned by the Member States under Article 30d of Directive 2003/87/EC. Where fewer than 100 million allowances are in the reserve, all allowances in the reserve shall be released under this paragraph.
7. The volumes to be released from the reserve in accordance with Article 30h of Directive 2003/87/EC shall be added to the volume of allowances covered by Chapter IVa to be auctioned by the Member States under Article 30d of Directive 2003/87/EC within a period of three months from the entry into application of the measure adopted pursuant to Article 30h of Directive 2003/87/EC.
8. Article 1(8) and Article 3 shall apply to the allowances covered by Chapter IVa of Directive 2003/87/EC.”.

Article 3

Amendments to Regulation (EU) 2015/757

Regulation (EU) 2015/757 is amended as follows:

- (1) in Article 3, the following points (q) and (r) are added:

“(q) ‘administering authority’ means the administering authority in respect of a shipping company referred to in Article 3gd of Directive 2003/87/EC of the European Parliament and of the Council*;

(r) ‘aggregated emissions data at company level’ means the sum of the CO₂ emissions to be reported by a company under Directive 2003/87/EC, in respect of all ships under its responsibility during the reporting period.

* Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC (OJ L 275 25.10.2003, p. 32).”;
- (2) in Article 4, the following paragraph 8 is added:

“8. Companies shall report the aggregated emissions data at company level of the ships under their responsibility during a reporting period pursuant to Article 11a.”;

- (3) in Article 5, paragraph 2 is replaced by the following:
- “2. The Commission is empowered to adopt delegated acts in accordance with Article 23 to amend the methods set out in Annex I and the rules set out in Annex II, in order to take into account revisions of Directive 2003/87/EC, relevant international rules as well as international and European standards. The Commission is also empowered to adopt delegated acts in accordance with Article 23 to amend Annexes I and II in order to refine the elements of the monitoring methods set out therein, in the light of technological and scientific developments and in order to ensure the effective operation of the EU ETS established pursuant to Directive 2003/87/EC.”;
- (4) Article 6 is amended as follows:
- (a) paragraph 5 is replaced by the following:
- “5. Companies shall use standardised monitoring plans based on templates and monitoring plans shall be submitted using automated systems and data exchange formats. Those templates, including the technical rules for their uniform application and automatic transfer, shall be determined by the Commission by means of implementing acts. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 24(2).”;
- (b) the following paragraphs 6, 7 and 8 are added:
- “6. Within three months of [date of entry into force of revised ETS Directive], companies shall submit to the responsible administering authority a monitoring plan for each of their ships falling under the scope of this Regulation, which shall first be assessed as being in conformity with this Regulation by the verifier.
7. Notwithstanding paragraph 6, for ships falling under the scope of this Regulation for the first time after the entry into force of [date of entry into force of the revised ETS Directive], companies shall submit a monitoring plan in conformity with the requirements of this Regulation to the responsible administering authority without undue delay and no later than three months after each ship's first call in a port under the jurisdiction of a Member State.
8. Within two years of entry into force of [revised ETS Directive], the responsible administering authorities shall approve the monitoring plans submitted by companies in accordance with the rules laid down in the delegated acts adopted by the Commission pursuant to the second subparagraph. For ships falling under the scope of [revised ETS Directive] for the first time after its entry into force, the responsible administering authority shall approve the submitted monitoring plan within four months after the ship's first call in a port under the jurisdiction of a Member State in accordance with the rules laid down in the delegated acts adopted by the Commission pursuant to the second subparagraph.
- The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Regulation concerning rules for the approval of monitoring plans by administering authorities.”;
- (5) Article 7 is amended as follows:
- (a) in paragraph 4, the second sentence is replaced by the following:

“Following the assessment, the verifier shall notify the company whether those modifications are in conformity. The company shall submit its modified monitoring plan to the responsible administering authority once it has received a notification from the verifier that the monitoring plan is in conformity.”;

- (b) the following paragraph 5 is added:

“5. The administering authority shall approve modifications of the monitoring plan under paragraph 2, points (a), (b), (c), (d), in accordance with the rules laid down in the delegated acts adopted by the Commission pursuant to the second subparagraph of this paragraph.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Regulation concerning rules for the approval of changes in the monitoring plans by administering authorities.”;

- (6) in Article 10, first subparagraph, the following point (k) is added:

“(k) total aggregated CO₂ emissions to be reported under Directive 2003/87/EC in relation to maritime transport activities.”;

- (7) the following Article 11a is inserted:

“Article 11a

Reporting and submission of the aggregated emissions data at company level

1. Companies shall determine the aggregated emissions data at company level during a reporting period, based on the data of the emissions report and the report referred to in Article 11(2) for each ship that was under their responsibility during the reporting period, in accordance with the rules laid down in the delegated acts adopted pursuant to paragraph 4.
 2. From 2024, the company shall submit to the responsible administering authority by 31 March of each year the aggregated emissions data at company level that covers the emissions in the reporting period to be reported under Directive 2003/87/EC in relation to maritime transport activities, in accordance with the rules laid down in the delegated acts adopted pursuant to paragraph 4 and that is verified in accordance with Chapter III of this Regulation (the ‘verified aggregated emissions data at company level’).
 3. The administering authority may require companies to submit the verified aggregated emissions data at company level by a date earlier than 31 March, but not earlier than by 28 February.
 4. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Regulation with the rules for the monitoring and reporting of the aggregated data at company level and the submission of the aggregated emissions data at company level to the administering authority.”;
- (8) Article 12 is amended as follows:
- (a) the title is replaced by the following:
“Format of the emissions report and reporting of aggregated emissions data at company level”;
 - (b) paragraph 1 is replaced by the following:

“1. The emissions report and the reporting of aggregated emissions data at company level shall be submitted using automated systems and data exchange formats, including electronic templates.”;

(9) Article 13 is amended as follows:

(a) paragraph 2 is replaced by the following:

“2. The verifier shall assess the conformity of the emissions report and the report referred to in Article 11(2) with the requirements laid down in Articles 8 to 12 and Annexes I and II.”;

(b) the following paragraphs 5 and 6 are added:

“5. The verifier shall assess the conformity of the aggregated emissions data at company level with the requirements laid down in the delegated acts adopted pursuant to paragraph 6.

Where the verifier concludes, with reasonable assurance, that the aggregated emissions data at company level are free from material misstatements, the verifier shall issue a verification report stating that the aggregated emissions data at company level have been verified as satisfactory in accordance with the rules laid down in the delegated acts adopted pursuant to paragraph 6.

6. The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Regulation with the rules for the verification of the aggregated emissions data at company level and the issuance of a verification report.”;

(10) Article 14 is amended as follows:

(a) in paragraph 2, point (d) is replaced by the following:

“(d) the calculations leading to the determination of the overall CO₂ emissions and of the total aggregated CO₂ emissions to be reported under Directive 2003/87/EC in relation to maritime transport activities;”;

(b) the following paragraph 4 is added:

“4. When considering the verification of the aggregated emissions data at company level, the verifier shall assess the completeness and the consistency of the reported data with the information provided by the company, including its verified emissions reports and the report referred to in Article 11(2).”;

(11) in Article 15, the following paragraph 6 is added:

“6. In respect of the verification of aggregated emissions data at company level, the verifier and the company shall comply with the verification rules laid down in the delegated acts adopted pursuant to the second subparagraph. The verifier shall not verify the emissions report and the report referred to in Article 11(2) of each ship under the responsibility of the company.

The Commission is empowered to adopt delegated acts in accordance with Article 23 to supplement this Regulation with the rules for the verification of aggregated emissions data at company level, including the verification methods and verification procedure.”;

(12) in Article 16, paragraph 1 is replaced by the following:

“1. Verifiers that assess the monitoring plans, the emissions reports and the aggregated emissions data at company level, and issue verification reports and documents of compliance referred to in this Regulation shall be accredited for activities under the scope of this Regulation by a national accreditation body pursuant to Regulation (EC) No 765/2008.”;

(13) in Article 20, paragraph 3 is replaced by the following:

“3. In the case of ships that have failed to comply with the monitoring and reporting requirements for two or more consecutive reporting periods and where other enforcement measures have failed to ensure compliance, the competent authority of the Member State of the port of entry may, after giving the opportunity to the company concerned to submit its observations, issue an expulsion order which shall be notified to the Commission, EMSA, the other Member States and the flag State concerned. As a result of the issuing of such an expulsion order, every Member State, with the exception of the Member State whose flag the ship is flying, shall refuse entry of the ship concerned into any of its ports until the company fulfils its monitoring and reporting obligations in accordance with Articles 11 and 18. Where the ship flies the flag of a Member State, the Member State concerned shall, after giving the opportunity to the company concerned to submit its observations, order the ship to be detained until the company fulfils its obligations. The fulfilment of those obligations shall be confirmed by the notification of a valid document of compliance to the competent national authority which issued the expulsion order. This paragraph shall be without prejudice to international maritime rules applicable in the case of ships in distress.”;

(14) Article 23 is amended as follows:

(a) in paragraph 2, the following subparagraph is added:

“The power to adopt delegated acts referred to in Article 5(2), as regards ensuring the functioning of the EU ETS, and Articles 6(8), 7(5), 11a(4), 13(6) and 15(6) shall be conferred on the Commission for an indeterminate period of time from the entry into force of [revised MRV Regulation].”;

(b) **in paragraphs 3 and 5, the words “Articles 5(2), 15(5), 16(3)” are replaced by the words “Articles 5(2), 6(8), 7(5), 11a(4), 13(6) 15(5), 15(6) and 16(3)”.**

Article 4

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with Articles 1 and 2 of this Directive by 31 December 2023 at the latest. They shall forthwith communicate to the Commission the text of those provisions.
2. When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.
3. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 5

Transitional provisions

1. When complying with their obligation set out in Article 4(1) of this Directive, Member States shall ensure that their national legislation transposing Article 3, point (u), Article 10a(3) and 10a(4), Article 10c(7) and Annex I, point 1, of Directive 2003/87/EC, in its version applicable on [*the day before the date of entry into force of this Directive*], continue to apply until 31 December 2025.

Article 6

Date of application of Article 3

Article 3 shall apply from [*date of entry into force of the revised ETS Directive*].

Article 7

Entry into force

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Article 8

Addressees

This Directive is addressed to the Member States. Article 3 shall, however, be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the European Parliament
The President

For the Council
The President

LEGISLATIVE FINANCIAL STATEMENT

Contents

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE
 - 1.1. Title of the proposal/initiative
 - 1.2. Policy area(s) concerned
 - 1.3. The proposal/initiative relates to:
 - 1.4. Objective(s)
 - 1.4.1. General objective(s)
 - 1.4.2. Specific objective(s)
 - 1.4.3. Expected result(s) and impact
 - 1.4.4. Indicators of performance
 - 1.5. Grounds for the proposal/initiative
 - 1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative
 - 1.5.2. Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention which is additional to the value that would have been otherwise created by Member States alone
 - 1.5.3. Lessons learned from similar experiences in the past
 - 1.5.4. Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments
 - 1.5.5. Assessment of the different available financing options, including scope for redeployment
 - 1.6. Duration and financial impact of the proposal/initiative
 - 1.7. Management mode(s) planned
2. MANAGEMENT MEASURES
 - 2.1. Monitoring and reporting rules
 - 2.2. Management and control system(s)
 - 2.2.1. Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed
 - 2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them
 - 2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)
 - 2.3. Measures to prevent fraud and irregularities
3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

- 3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected
- 3.2. Estimated financial impact of the proposal on appropriations
 - 3.2.1. Summary of estimated impact on operational appropriations
 - 3.2.2. Estimated output funded with operational appropriations
 - 3.2.3. Summary of estimated impact on administrative appropriations
 - 3.2.4. Compatibility with the current multiannual financial framework
 - 3.2.5. Third-party contributions
- 3.3. Estimated impact on revenue

LEGISLATIVE FINANCIAL STATEMENT
FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC and Decision (EU) 2015/1814 to strengthen the EU Emissions Trading System and extend it in line with the Union's increased climate ambition for 2030.

1.2. Policy area(s) concerned

Climate Action
Heading 3 Natural resources and Environment
Title 9 – Environment and Climate Action

1.3. The proposal/initiative relates to:

- ☐ a new action
- ☐ a new action following a pilot project/preparatory action⁶⁷
- ✓ the extension of an existing action
- ☐ a merger or redirection of one or more actions towards another/a new action

1.4. Objective(s)

1.4.1. General objective(s)

To revise the ETS Directive in a manner commensurate with the 2030 climate ambition to reach at least 55 % net greenhouse gas emission reductions by 2030 below 1990 levels and with a gradual and balanced trajectory towards climate neutrality by 2050, in a cost-effective and coherent way while taking into account the need for a just transition and the need for all sectors to contribute to the EU's climate efforts.

1.4.2. Specific objective(s)

Specific objective No 1

Strengthening the EU Emissions Trading System (EU ETS) in its current scope in order to provide the appropriate contribution to an overall target of at least -55 % GHG emissions compared to 1990.

Specific objective No 2

Ensuring continued effective protection for the sectors exposed to a significant risk of carbon leakage while incentivising the uptake of low-carbon technologies.

Specific objective No 3

Addressing the distributional and social effects of this transition, by reviewing the use of auctioning revenues and the size and functioning of the low-carbon funding mechanisms.

Specific objective No 4

⁶⁷ As referred to in Article 58(2)(a) or (b) of the Financial Regulation.

Ensuring that the other sectors than those currently included in the EU ETS contribute cost-effectively to the emission reductions needed in line with EU targets and Paris Agreement commitments, notably by including emissions from maritime transport in the EU ETS and by amending Regulation (EU) 2015/757 to make it fit for emissions trading.

Specific objective No 5

Ensuring that the other sectors than those currently included in the EU ETS contribute cost-effectively to the emission reductions needed in line with EU targets and Paris Agreement commitments, also by including emissions trading for buildings and road transport while ensuring synergies with other complementary policies targeting those sectors.

Specific objective No 6

Reviewing the Market Stability Reserve (MSR) in line with the corresponding legal obligation and examining possible amendments to its design, to fulfil the legal objectives in the MSR decision and to address any issues that may be raised in the context of the increased ambition.

1.4.3. *Expected result(s) and impact*

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

The current ETS legislation was revised in 2018 to deliver a 43 % reduction in EU ETS emissions by 2030 compared to 2005, coherent with an EU economy-wide emissions reduction target of at least 40 % by 2030 compared to 1990. If the legislation remains unchanged, the economic sectors currently covered by the ETS would not provide a sufficient contribution to the revised overall EU greenhouse gas emission reduction target of at least -55 % in 2030 compared to 1990.

The present initiative establishes the framework necessary to achieve the expected emission reductions by:

- making the EU ETS fit for the increased climate ambition of at least 55 % net emission reduction, as enshrined in the European Climate Law⁶⁸.
- strengthens the Innovation Fund as a stepped-up effort to rapidly scale-up low carbon technologies to the market enabling the EU to reach its emission reductions target.
- strengthens the Modernisation Fund to speed-up the modernisation of the energy systems in lower income Member States.
- ensuring that the maritime transport sector contributes cost-effectively to the emission reductions needed in line with EU targets and Paris Agreement commitments by notably covering at least intra-EEA maritime transport emissions.
- ensuring the relevant contribution of the sectors of road transport and buildings to the new greenhouse gas emissions reduction target.

⁶⁸

Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1).

The framework is revised in a manner that preserves the integrity of the current ETS and takes into account the need to address distributional concerns and energy poverty.

1.4.4. *Indicators of performance*

Specify the indicators for monitoring progress and achievements.

Indicator nr 1: level of reduction of greenhouse gas emissions in the EU in 2030 (55 % reduction target compared to 1990, as enshrined in the European Climate Law).

Indicator nr 2: level of reduction of greenhouse gas emissions for the sectors in the existing EU Emissions Trading System (ETS) in 2030 (61 % reduction target compared to 2005)

Indicator nr 3: level of reduction of greenhouse gas emissions for the road transport and buildings sectors in the new ETS in 2030 (43 % reduction target compared to 2005).

The levels of reduction of greenhouse gas emissions in the EU are reported under Regulation (EU) 2018/1999 and other secondary legislation related to monitoring and reporting in the ETS.

1.5. **Grounds for the proposal/initiative**

1.5.1. *Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative*

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive and the Commission is to develop the relevant implementing measures.

Further measures to develop, starting after the adoption of the Directive, will include revising and adopting a number of secondary legislative acts. In particular, this will concern the secondary legislation setting out detailed rules on auctioning; Union Registry; monitoring and reporting of emissions and verification of emission reports and accreditation of verifiers; and free allocation. The implementation will also require elaborate IT developments in the Union Registry to deal with new type of allowances and new operators and launch a new procurement procedure for the common auction platform. IT development and procurement choices will be performed according to the Communication on the guidelines on financing of information technology and cybersecurity, of 10 September 2020⁶⁹.

1.5.2. *Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention which is additional to the value that would have been otherwise created by Member States alone.*

Climate change is a transboundary problem and EU action can effectively complement and reinforce regional, national and local action. Increasing the 2030 target for EU greenhouse gas reductions will impact many sectors across the EU economy and coordinated action at the EU level is therefore indispensable and has a much bigger chance of leading to the necessary transformation, acting as a strong driver for cost-efficient change and upward convergence. Furthermore, many of the

⁶⁹ C(2020) 6126.

elements of this proposal have an important internal market dimension, in particular the options related to the carbon leakage protection and the low-carbon funding mechanisms.

As a carbon market, the EU ETS incentivises emission reductions to be made by the most cost-efficient solutions first across the activities it covers, achieving greater efficiency by virtue of its scale. Implementing a similar measure nationally would result in smaller, fragmented carbon markets, risking distortions of competition and likely lead to higher overall abatement costs. The same logic holds for the extension of carbon pricing to new sectors.

The cross-border dimension of the maritime transport sector calls for coordinated action at European level. EU action can also inspire and pave the way for the development of global action, e.g. as regards the maritime transport within International Maritime Organization.

1.5.3. Lessons learned from similar experiences in the past

The ETS Directive is an existing EU policy instrument adopted in 2003. The Commission has gained valuable experience during more than 15 years for which the EU ETS has been in operation.

This proposal builds upon experience gathered in the previous EU ETS revisions and initiatives, including the most recent revision concluded in 2018, the Communication on stepping up Europe's 2030 climate ambition, the Long-Term Strategy for a prosperous, modern, competitive and climate-neutral economy and other relevant European Green Deal initiatives. The initiative also builds on the process based on integrated national energy and climate plans and the framework contained in the Governance Regulation.

1.5.4. Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments

Related operational expenditure can be covered by appropriations under the LIFE programme⁷⁰ as agreed under the current MFF.

This proposal is a part of the 'Fit for 55' climate and energy package. The overall objective of the package is to align Union legislation with the EU's increased climate ambition. All initiatives in the package are closely interlinked, and each one depends on the design of the others. This legislative proposal is complementary to the proposals made in the package and maintains consistency with them.

Consistency with other Union policies is also ensured through the coherence of the impact assessments for the EU ETS with those for the remainder of the 2030 climate, energy and transport framework⁷¹, such as the complementarity of extending

⁷⁰ Regulation (EU) 2021/783 of the European Parliament and of the Council of 29 April 2021 establishing a Programme for the Environment and Climate Action (LIFE) and repealing Regulation (EU) No 1293/2013 (OJ L 172, 17.5.2021, p. 53–78).

⁷¹ Notably the ESR; the Land Use, Land Use Change and Forestry (LULUCF) Regulation; CO2 Emissions Performance Standards for Cars and Vans; the Renewable Energy Directive (REDII); the Energy Efficiency Directive (EED); and, at a later stage, the Energy Performance of Buildings Directive. Other relevant initiatives include the revision of the Energy Taxation Directive; the Zero Pollution Action Plan and the revision of the Industrial Emissions Directive; initiatives on mobility, such as those on transport fuels (FuelEU maritime initiative and ReFuelEU aviation initiative) and a proposal for a Carbon Border Adjustment Mechanism (CBAM).

emission trading with the Energy Efficiency Directive⁷², and with other measures presented as part of the basket of measures to address greenhouse gas emissions from maritime transport. A common baseline and common core policy scenarios with other initiatives of the package are used. These scenarios take into account all relevant EU actions and policies.

Additional administrative costs could be limited by using, where possible, existing structures used for the Directive laying down the general arrangements for excise duty and the Energy Taxation Directive. In turn, additional energy savings would be enhanced by the new ETS, with its potential link to energy savings under Article 7 of the Energy Efficiency Directive.

1.5.5. Assessment of the different available financing options, including scope for redeployment

- Duration and financial impact of the proposal/initiative

☐ **limited duration**

☐ in effect from [DD/MM]YYYY to [DD/MM]YYYY

☐ Financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

✓ **unlimited duration**

- Implementation with a start-up period from 2023 to 2024,
- followed by full-scale operation.

1.6. Management mode(s) planned⁷³

✓ **Direct management** by the Commission

✓ by its departments, including by its staff in the Union delegations;

✓ by the executive agencies

☐ **Shared management** with the Member States

✓ **Indirect management** by entrusting budget implementation tasks to:

☐ third countries or the bodies they have designated;

☐ international organisations and their agencies (to be specified);

✓ the EIB and the European Investment Fund;

☐ bodies referred to in Articles 70 and 71 of the Financial Regulation;

☐ public law bodies;

☐ bodies governed by private law with a public service mission to the extent that they provide adequate financial guarantees;

⁷² Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1–56).

⁷³ Details of management modes and references to the Financial Regulation may be found on the BudgWeb site:
<https://myintracomm.ec.europa.eu/budgweb/EN/man/budgmanag/Pages/budgmanag.aspx>

- ☐ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that provide adequate financial guarantees;
- ☐ persons entrusted with the implementation of specific actions in the CFSP pursuant to Title V of the TEU, and identified in the relevant basic act.

If more than one management mode is indicated, please provide details in the 'Comments' section.

Comments

The management of EU ETS allowances is done through legislation for which the Commission departments are responsible.

The Innovation Fund is largely implemented by European Climate, Infrastructure and Environment Executive Agency (CINEA).

The Modernisation Fund operates under the responsibility of the beneficiary Member States, who work in close cooperation with the European Investment Bank (EIB), the Investment Committee set up for the fund and the European Commission.

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

Specify frequency and conditions.

The Commission will continue to monitor and evaluate the functioning of the ETS in its annual Carbon Market Report, as foreseen under Article 10(5) of the ETS Directive. This covers also the impacts of the current revision of the ETS. The Commission's annual Carbon Market Report and Member States annual report shall also apply to the sectors to which emissions trading is extended. The MRV data obtained through the regulation of the new sectors will be a key source for information for the Commission to evaluate progress in the sectors concerned.

Furthermore, evaluation of progress on the application of the ETS Directive is regulated in the current Article 21, which requires Member States to submit to the Commission an annual report paying particular attention to issues including the allocation of allowances, operation of the Registry, application of monitoring and reporting, verification and accreditation and issues relating to compliance.

Finally, the Commission regularly carries out studies on various pertinent aspects of EU climate policy.

2.2. Management and control system(s)

2.2.1. *Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed*

Not applicable - The proposal is not implementing a new financial programme but designing a long-term policy. Management mode, funding implementation mechanisms, payment modalities and control strategy in relation to error rates are not applicable. The implementation of this proposal will require the redeployment of human resources within the Commission. Appropriate procedures are in place.

2.2.2. *Information concerning the risks identified and the internal control system(s) set up to mitigate them*

The EU ETS is the flagship policy mechanism to achieve the EU's emission reductions from around half the economy. Since 2013, the Commission is tasked to provide a Union Registry, an online database that provides an accurate accounting for all allowances transaction, a common auctioning platform for the auctioning of Member States allowances and the relevant support infrastructure for both. The Union Registry in which allowances are held under the EU ETS is threatened by a risk of fraudulent cyber-attacks that could result in theft or misappropriation of allowances leading to significant financial loss (up to several billion euros), legal litigation and considerable impact on Commission's reputation and credibility. The risk is cross-cutting and, alongside DG CLIMA, involves DG DIGIT, HR-DS, BUDG and LS. Mitigating measures have been put in place. The financial risk would increase in line with increases in the value of the carbon market. The distribution of free allowances at a very high total value also requires strict policies on how these allowances can be distributed, and assurance of respect of the rules in place. This involves management and control system at the level of the Member States and at the level of the Commission. Finally, adding the new sectors to the ETS will increase the overall coverage of the system and correspondingly the value of the market and associated risk.

A High-level Steering Committee involving the lead DG and associated DGs is in place since 2011. A fully-fledged risk assessment has been conducted in 2014 which has identified new IT security measures taken as from 2015. As a result of the recommendations put forward by the IAS in its audit report on the EU ETS Registry (IT security), measures to further improve the security of the registry system as well as measures on governance, quality assurance and testing have been implemented. Additional mitigating actions are being implemented since 2014.

In 2019, a new risk assessment has been carried out for the Union Registry. DG CLIMA drafted a new security plan containing twelve security measures to be implemented within two years in close collaboration with DIGIT.

The implementation is monitored at Senior Management level with regular Steering Committees between DG CLIMA and DIGIT.

- 2.2.3. *Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)*

This initiative does not bring about new significant controls/risks that would not be covered by an existing internal control framework. No specific measures beyond the application of the Financial Regulation have been envisaged.

2.3. **Measures to prevent fraud and irregularities**

Specify existing or envisaged prevention and protection measures, e.g. from the Anti-Fraud Strategy.

In response to the specific fraud risks for the EU ETS, DG CLIMA reinforced the Commission-wide guidelines regarding professional ethics and integrity by a dedicated "Code of Ethics and Conduct in relation to insider trading, fraud and disclosure of sensitive information", specific trainings, awareness raising initiatives. It also developed the EU ETS Sensitive Information Classification Policy and the related handling instructions with 3 levels of sensitivity. The related three ETS markings are approved by DG HR-DS (as referenced in Security Notice 1 in its revision 10). In 2019, DG HR-DS published security notice C(2019) 1904 updating Sensitive Non-Classified (SNC) information policy. DG CLIMA, in alignment with this new policy, published new handling instructions for DG CLIMA SNC information. Appropriate training sessions for newcomers are organised on a regular basis.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

(2) Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of	Contribution			
	Number	Diff./Non-diff.[1]	from EFTA countries[2]	from candidate countries[3]	from third countries	within the meaning of Article 21(2)(b) of the Financial Regulation
3	09 01 01 01	Non-diff.	YES	NO	NO	NO
3	09 02 03	Diff.	YES	NO	NO	NO
7	20 01 02 01	Non-diff.	NO	NO	NO	NO
7	20 02 06 01	Non-diff.	NO	NO	NO	NO
7	20 02 06 02	Non-diff.	NO	NO	NO	NO
7	20 02 06 03	Non-diff.	NO	NO	NO	NO

(3) New budget lines requested: Not applicable.

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

- ☐ The proposal/initiative does not require the use of operational appropriations
- ☒ The proposal/initiative requires the use of operational appropriations, as explained below:

EUR million (to three decimal places)

Heading of multiannual financial framework			3	'natural resources and environment'				
DG: CLIMA			2023	2024	2025	2026	2027	TOTAL
Operational appropriations								
09 02 03	Commitments	(1)	1,241	1,485	2,138	1,893	1,369	8,126
	Payments	(2)		0,496	1,339	1,747	2,040	5,622
Appropriations of an administrative nature financed from the envelope of specific programmes								
09 01 01 01		(3)	1,029	1,632	1,476	1,184	0,952	6,273
TOTAL appropriations DG CLIMA	Commitments	= 1 + 3	2,270	3,118	3,615	3,077	2,320	14,400
	Payments	= 2 + 3	1,029	2,128	2,815	2,931	2,992	11,895
TOTAL operational appropriations	Commitments	(4)	1,241	1,485	2,138	1,893	1,369	8,126
	Payments	(5)	-	0,496	1,339	1,747	2,040	5,622
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	1,029	1,632	1,476	1,184	0,952	6,273
TOTAL appropriations under HEADING 3 of the multiannual financial framework	Commitments	= 4 + 6	2,270	3,118	3,615	3,077	2,320	14,400
	Payments	= 5 + 6	1,029	2,128	2,815	2,931	2,992	11,895

	Commitments	(4)	1,241	1,485	2,138	1,893	1,369	8,126
TOTAL operational appropriations	Payments	(5)	-	0,496	1,339	1,747	2,040	5,622
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	1,029	1,632	1,476	1,184	0,952	6,273
TOTAL appropriations under HEADINGS 1 to 6 of the multiannual financial framework (Reference amount)	Commitments	= 4 + 6	2,270	3,118	3,615	3,077	2,320	14,400
	Payments	= 5 + 6	1,029	2,128	2,815	2,931	2,992	11,895

Heading of multiannual financial framework	7	‘Administrative expenditure’
---	----------	-------------------------------------

This section should be filled in using the 'budget data of an administrative nature' to be firstly introduced in the Annex to the Legislative Financial Statement (Annex V to the internal rules), which is uploaded to DECIDE for interservice consultation purposes.

EUR million (to three decimal places)						
	2023	2024	2025	2026	2027	TOTAL
DG: CLIMA						
Human resources	3,344	3,648	3,648	3,648	3,648	17,936
Other administrative expenditure	0,210	0,404	0,176	0,060	0,060	0,910
TOTAL DG CLIMA	3,554	4,052	3,824	3,708	3,708	18,846
TOTAL appropriations under HEADING 7 of the multiannual financial framework	(Total commitments = Total payments)	3,554	4,052	3,824	3,708	18,846

EUR million (to three decimal places)						
	2023	2024	2025	2026	2027	TOTAL
TOTAL appropriations under HEADINGS 1 to 7 of the multiannual financial framework	Commitments	5,824	7,170	7,439	6,785	33,245
	Payments	4,583	6,180	6,639	6,639	30,741

3.2.2. Estimated output funded with operational appropriations

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs	budget line	OUTPUTS		2023		2024		2025		2026		2027		total	
		Type[1]	Average cost	≥	Cost	≥	Cost	≥	Cost	≥	Cost	≥	Cost	≥	Cost
specific objective 4 - maritime															
- update the platform Thetis-MRV	09 02 03	cooperation agreement EMSA			0,250										0,250
- modifications Union Registry	09 02 03	Service Contracts			0,260		0,304		0,133		0,127		0,126		0,949
	09 01 01 01	QTM, Extramuros, equipment			0,626		0,730		0,330		0,316		0,313		2,314
- extension Service desk	09 02 03	Service Contracts			0,000		0,013		0,099		0,088		0,080		0,280
	09 01 01 01	QTM, Extramuros, equipment			0,000		0,053		0,116		0,083		0,055		0,306
- update ETS reporting system MRV	09 02 03	Service Contracts			0,099		0,120		0,202		0,103		0,054		0,579
Subtotal for specific objective No 4					1,234		1,220		0,880		0,715		0,628		4,677
specific objective 5 - buildings and transport															
- modifications Union Registry	09 02 03	Service Contracts			0,173		0,203		0,089		0,084		0,084		0,633
	09 01 01 01	QTM, Extramuros, equipment			0,404		0,473		0,207		0,197		0,195		1,476
- extension Service desk	09 02 03	Service Contracts			0,000		0,091		0,365		0,300		0,250		1,007
	09 01 01 01	QTM, Extramuros, equipment			0,000		0,377		0,824		0,589		0,389		2,178
- update ETS reporting system MRV	09 02 03	Service Contracts			0,459		0,754		1,250		1,191		0,774		4,429
Subtotal for specific objective No 5					1,036		1,898		2,734		2,362		1,692		9,722
TOTALS					2,270		3,118		3,615		3,077		2,320		14,400

3.2.3. Summary of estimated impact on administrative appropriations

- ☐ The proposal/initiative does not require the use of appropriations of an administrative nature
- ☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:

EUR million (to three decimal places)

	2023	2024	2025	2026	2027	TOTAL
HEADING 7 of the multiannual financial framework						
Human resources	3,344	3,648	3,648	3,648	3,648	17,936
Other administrative expenditure	0,210	0,404	0,176	0,060	0,060	0,910
Subtotal HEADING 7 of the multiannual financial framework	3,554	4,052	3,824	3,708	3,708	18,846
Outside HEADING 7[1] of the multiannual financial framework						
Human resources						
Other expenditure of an administrative nature	1,029	1,632	1,476	1,184	0,952	6,273
Subtotal outside HEADING 7 of the multiannual financial framework	1,029	1,632	1,476	1,184	0,952	6,273
TOTAL	4,583	5,684	5,300	4,892	4,660	25,119

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

3.2.3.1. Estimated requirements of human resources

- ☐ The proposal/initiative does not require the use of human resources.
- ☒ The proposal/initiative requires the use of human resources, as explained below:

Estimate to be expressed in full time equivalent units

	2023	2024	2025	2026	2027
Y Establishment plan posts (officials and temporary staff)					
20 01 02 01 (Headquarters and Commission's Representation Offices)	22	24	24	24	24
20 01 02 03 (Delegations)					
01 01 01 01 (Indirect research)					
01 01 01 11 (Direct research)					
Other budget lines (specify)					
Y External staff (in Full Time Equivalent unit: FTE)[1]					
20 02 01 (AC, END, INT from the 'global envelope')					
20 02 03 (AC, AL, END, INT and JPD in the delegations)					
XX 01 xx yy zz	- at Headquarters				
	- in Delegations				
01 01 01 02 (AC, END, INT - Indirect research)					
01 01 01 12 (AC, END, INT - Direct research)					
Other budget lines (specify)					
TOTAL	22	24	24	24	24

XX is the policy area or budget title concerned.

The human resources required will be met by staff from the DG who are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

Description of tasks to be carried out:

Officials and temporary staff	<p>Additional HR resources are required for:</p> <ul style="list-style-type: none"> - Legal drafting and approval of amendments of secondary legislation setting out detailed implementing rules on auctioning; Union Registry; monitoring and reporting; verification of emission reports and accreditation of verifiers; free allocation; - Implementation tasks related to the ETS extension to maritime transport (including the necessary amendments to the existing MRV system) and to the new emissions trading for buildings and road transport; - Procurement of the new auction platform(s) for auctioning of general allowances, as well as a new type of allowances for the sectors of buildings and road transport - Monitoring the implementation of monitoring, reporting and verification (MRV) obligations - Further implementation and oversight of low carbon funds - IT adaptations in the Union Registry.
External staff	

3.2.4. *Compatibility with the current multiannual financial framework*

The proposal/initiative:

- ☒ can be fully financed within the relevant heading of the Multiannual Financial Framework (MFF).

The expenditure will be covered within the LIFE envelope.

- ☐ requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation.

-

- ☐ requires a revision of the MFF.

-

3.2.5. *Third-party contributions*

The proposal/initiative:

- ☒ does not provide for co-financing by third parties
- ☐ provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	2023	2024	2025	2026	2027	Total
Specify the co-financing body						
TOTAL appropriations co-financed						

Estimated impact on revenue

- ☐ The proposal/initiative has no financial impact on revenue.
- ☒ The proposal/initiative has the following financial impact:
 - ☒ on own resources
 - ☒ on other revenue

please indicate, if the revenue is assigned to expenditure lines ☐

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative ⁷⁴				
		2023	2024	2025	2026	2027
Article						

For assigned revenue, specify the budget expenditure line(s) affected.

-

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

This cannot be quantified

⁷⁴

As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20 % for collection costs.